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EDUCATION COUNCIL of the NEBRASKA INFORMATION TECHNOLOGY COMMISSION

Friday, March 18, 2005 9:00AM-12:00PM CST

Nebraska Educational Telecommunications Board Room 1800 N. 33rd, Lincoln, Nebraska

(Videoconferencing at McKinley Education Center-North Platte, NE)

Proposed Agenda

(The Council will attempt to adhere to the sequence of the published agenda, but reserves the right to adjust the order of items if necessary and may elect to take action on any of the items listed. Items marked in **BOLD** are expected action items.)

2. Consider approval of the Agenda for the March 18, 2005 meeting 3. Consider approval of Minutes from the January 21, 2005 meeting 9:07 AM meeting 9:10 AM 4. Public Comment Co-Chai 9:15 AM 5. NITC Report & DAS Division Reorganization A. NITC Strategic Initiatives Update 9:25 AM 6. Legislative Update A. Education Council 1/21/05 motion B. L8467 & LB689, LB689-AM403, LB689A, Unofficial markup version of amended LB689 C. Suggested membership for the Distance Education Enhancement Task Force (worksheet) 7. Discussion: "Converting distance learning networks to a high bandwidth, flexible infrastructure" white paper A. Issues and task groups (worksheet) 9. Education Council Membership (list of members and vacancies) 11:40 AM vacancies) 11. Confirm locations for the May 20 (Millard Public Schools) and July 15 meetings			· · · · · · · · · · · · · · · · · · ·
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	11:55 AM	12. Adjournment	Co-Chair

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Optional tour of remodeled NET facility following meeting

Beach

The NITC Education Council wishes to thank NET for hosting the March 18, 2005 meeting. NITC/Education Council Homepage: http://www.nitc.state.ne.us Meeting Notice Posted to the NITC Web site 02-16-05 Meeting Notice Posted to the Nebraska Public Meeting Calendar 02-23-05 Agenda Posted to the NITC Web site 03-16-05

EDUCATION COUNCIL

Nebraska Information Technology Commission Friday, January 21, 2005, 9:00 a.m. University of Nebraska-Lincoln, East Campus Union 311 Agriculture Hall Lincoln, Nebraska

PROPOSED MINUTES

VOTING MEMBERS/ALTERNATES PRESENT:

Mr. Arnold Bateman. University of Nebraska-Lincoln

Mr. Dennis Baack, alt. Representing community colleges

Linda Engel, Nebraska City Public Schools

Dr. Terry Haack, Bennington Public Schools

Mr. Jerry Harnisch, Midland Lutheran College

Ms. Yvette Holly, University of Nebraska Medical Center (Omaha Videoconference Site)

Mr. Jeff Johnson, Centennial Public Schools

Mr. Joe LeDuc, Catholic Diocese of Lincoln

Mr. Chuck Lenosky, Creighton University

Mr. Dennis Linster, Wayne State College

Mr. Mike Pate, Millard Public Schools (Omaha Videoconference Site)

Dr. Ed Rastovski, Wahoo Public Schools

Mr. Al Schneider, Educational Service Unit 5

Dr. Robin Smith, Chadron State College (Chadron Videoconference Site)

Mr. Alan Wibbels, Educational Service Unit 10

LIAISON MEMBERS PRESENT:

Ms. Brenda Decker, Division of Communications

Mr. Wavne Fisher, Department of Education

Mr. Michael Beach, Nebraska Educational Telecommunications

MEMBERS/LIAISONS ABSENT: Dr. Michael Chipps, Mid-Plains Community College; Dr. Jack Huck, Southeast Community College; Tip O'Neill, Alt. representing Independent Colleges; Dr. David Powers, Coordinating Commission for Postsecondary Education

CALL TO ORDER, ELECTRONIC POSTING, ROLL CALL

Mr. Wibbels called the meeting to order at 2:05 p.m. It was stated that the meeting notice was posted to the NITC and Nebraska Public Meeting Calendar Web sites on October 15, 2004 and that the meeting agenda was posted to the NITC Web site on November 15, 2004. There were 8 voting members present at the time of roll call. A quorum existed to conduct official business.

APPROVAL OF THE JANUARY 21, 2005 AGENDA

Ms. Engel moved to approve the January 21st agenda as presented. Mr. Bateman seconded the motion. Roll call vote: Bateman-Yes, Engel-Yes, Haack-Yes, Holly-Yes, Johnson-Yes, LeDuc-Yes, Lenosky-Yes, Linster-Yes, Pate-Yes, Rastovski-Yes, Schneider-Yes, Smith-Yes, and Wibbels-Yes. Results: 13-Yes, 0-No. The motion was carried by unanimous vote.

APPROVAL OF NOVEMBER 19, 2004 MINUTES

Mr. LeDuc corrected the title of his affiliation. It should read Catholic Diocese of Lincoln rather than Lincoln Pius X High School.

Mr. Bateman moved to approve the <u>November 19th minutes</u> as corrected. Mr. Linster seconded the motion. Roll call vote: Wibbels-Yes, Smith-Yes, Schneider-Yes, Rastovski-Yes, Pate-Yes, Linster-Yes, Lenosky-Yes, LeDuc-Yes, Johnson-Yes, Holly-Yes, Haack-Yes, Engel-Yes, and Bateman-Yes. Results: 13-Yes, 0-No. The motion was carried by unanimous vote.

PUBLIC COMMENT

There was no public comment.

EDUCATION COUNCIL DIRECTION AND RESPONSIBILITIES

Mr. Rolfes reported that the results of the survey indicated to keep the council meeting on the 3rd Friday and to meet bi-monthly with the off month for task groups. A concern was raised regarding the voting on meeting frequency. Due to alternates also voting, some members felt the results may have been slanted.

Mr. Rastovski moved that the Education Council meet on a bimonthly basis with the off months used for task force meetings if needed. Mr. Pate seconded the motion. Roll call vote: Johnson-Yes, Smith-Yes, LeDuc-Yes, Lenosky-Yes, Linster-Yes, Pate-Yes, Rastovski-Yes, Wibbels-Yes, Bateman-Yes, Baack-Yes, Engel-Yes, Haack-Yes, and Holly-Yes. Results: 13-Yes, 0-No. Motion was carried by unanimous vote.

Mr. Schneider arrived at 9:33 a.m.

Education Council Charter:

The statutory language (5.1) of the Education Charter reads as follows, "The mission of the Council is to advise the Commission concerning education information technology needs, goals, and policy. The Council will identify, coordinate, and prioritize matters pertaining to information technology for a more strategic and cost-effective approach to developing the State's education information technology infrastructure." NITC Education Council 2005 Legislative Intent Language as contained in LB 425; Sec. 165, Agency No. 47-Nebraska Educational Telecommunications Commission shifts much of prior NEB*SAT Coordinating Council responsibilities to the Education Council. Discussion followed regarding the purpose of the NITC Education Council:

- In the 6 years of the Education Council's existence, it has made a lot of progress and has accomplished many tasks, for example Network Nebraska.
- It has built and brought collaboration and cooperation among educational entities.
- The current Education Council membership should reflect what is written in the intent language of LB 425, Section 165.
- NETC budget has a line item for NITC funding (4.f. of LB 425 intent language). The Education Council has
 not taken advantage of this tool to make funding recommendations to the NETC. The NETC would then
 make recommendations to the legislature.
- The council needs to be proactive per dates of intent.
- Backbone need to explore how to use it, focus on the program side, promote use of tax dollars for connectivity through Network Nebraska.
- LB 689 will establish a distance education task force to develop a distance education plan -\$10 million over the next three years.
- Grant writing for funding efforts. How does the council take advantage of these types of opportunities? There are monies for the development of health care telecommunications.

Network Nebraska Initiative: Next Steps Discussion

- Besides transport, explore what other uses may be possible for Network Nebraska.
- Need to do more internal promotion and awareness.
- The Division of Communications and the University of Nebraska are DOC/UNL are currently working on a fee for service option. If the Education Council made this a recommendation for K20 usage, postalization could be a possibility.
- A white paper is being written to explain the need for LB 689, assist K12 redesign their networks, and provide best practices.
- Nebraska Universal Service Fund. The question was raised as to whether the Education Council should make a recommendation to the NITC regarding this fund to assist with Network Nebraska efforts.
 Discussion followed but no action was taken.
- Network Nebraska Users Group. A suggestion was made that a users group be established through CAP.
 Ms. Decker stated that CAP would be open to the suggestion but that CAP would want the Education
 Council's assistance. CAP would request that the council sectors discuss it further, make a commitment,
 and make recommendation as to possible members. Mr. Wibbels suggested that members could be
 "technical users" and/or "stakeholders", for example representatives from NETC or NDLA (Nebraska
 Distance Learning Association).

 Because of Network Nebraska, dialogues are occurring between different entities that would not have happened years ago.

Statewide Synchronous Video Network Initiative: Next Steps Discussion

A draft white paper is currently being circulated that will be given to the legislature to recommend how the \$10 million would be spent if funded. (Look at draft.) Graphic image. Open process to collect process – would – updated router, switch routers, codecs, and ability to deliver digital and web learning to the classrooms. Paper to be completed by January 31st. Technical barriers can be overcome....it is the funding, services areas of educational institution, and/or approval of courses. Need to get away from traditional concept of distance learning – it is web streaming, file sharing.

e-Learning Initiative: Next Steps Discussion

As a result of the e-Learning workshops conducted by Tom Rolfes and Jim Zemke, a written report will be developed for the NITC.

Legislative Update - LB 467 and LB 689

NOL has developed a unicameral bill tracker that is available to citizens. Comments regarding LB467 were covered in Education Council Charter section of the meeting.

If passed, LB 689 will establish a Distance Education Enhancement Task Force. Members of the task force shall be appointed on or before June 15, 2005, and shall include:

- (1) The chairperson and one other member of the Education Committee of the Legislature;
- (2) The chairperson of the Transportation and Telecommunications Committee of the Legislature;
- (3) The chairperson of the Appropriations Committee of the Legislature;
- (4) Two representatives of educational service units;
- (5) Two representatives of distance education consortia;
- (6) Two representatives of the State Department of Education, one of whom shall have expertise in technology infrastructure:
- (7) Two representatives of the Public Service Commission;
- (8) Two representatives of the Nebraska Information Technology Commission;
- (9) Two representatives of postsecondary education; and
- (10) One representative of the Governor.

The members listed in subdivisions (1), (4), (5), (7), and (9) of this section shall be appointed by the Executive Board of the Legislative Council. The members listed in subdivisions (6), (8), and (10) of this section shall be appointed by the Governor.

Sec. 2. The Distance Education Enhancement Task Force shall develop an improvement plan to upgrade and coordinate distance education in Nebraska. The task force shall make recommendations for policies and potential legislation to the Clerk of the Legislature, the Education Committee of the Legislature, the Transportation and Telecommunications Committee of the Legislature, and the Appropriations Committee of the Legislature on or before November 1, 2005. The plan shall include, but not be limited to:

- 1) The development of a broadband, scalable telecommunications infrastructure for use in distance learning classrooms;
- 2) The development of an Internet protocol-based network to interconnect all existing and future distance education and videoconferencing facilities;
- 3) Upgrades of current telecommunications equipment;
- 4) Training and support programs for educators in the development and use of distance learning;
- 5) The transfer of distance education coordination responsibilities from distance education consortia to educational service units on or before July 1, 2007;
- 6) Statewide coordination for distance education offerings;
- 7) Potential funding sources;
- 8) The establishment of an equitable and affordable financing system for both equipment and usage;
- 9) The establishment of a system that allows school districts to purchase quality distance education offerings from other school districts either directly or with educational service units acting as fiscal agents; and
- 10) Statewide provision of other technology-based services.

There were concerns expressed regarding the membership of the Distance Education Enhancement Task Force.

Mr. Rastovski moved that the Education Council send correspondence to the NITC requesting broader representation of K12 and higher education on the Distance Education Enhancement Task Force. Mr. Johnson seconded the motion. Discussion followed. Mr. Rolfes had received a letter from the Assistive Technology Partnership Program requesting that someone that is familiar with assistive technology should also serve on the task force. Discussion followed as to sector representation. Mr. Rastovski and Mr. Johnson accepted Mr. LeDuc's friendly amendment to their motion. The motion now reads, "that the Education Council send correspondence to the NITC requesting broader representation of K12 (State School Board Association, Teachers Association, School Administrators Association, and private/parochial K12) and higher education (University of Nebraska; state, community and independent colleges; one of whom is proficient in Assistive Technologies) on the Distance Education Enhancement Task Force. Roll call vote: Lenosky-Yes, LeDuc-Yes, Smith-Yes, Johnson-Yes, Holly-Yes, Haack-Yes, Engel-Yes, Baack-Yes, Bateman-Yes, Wibbels-Yes, Schneider-Yes, Rastovski-Yes, Pate-Yes, and Linster-Yes. Results: 14-Yes, 0-No. Motion was carried by unanimous vote.

Mr. Rolfes will draft the correspondence and solicit input from the co-chairs before it is sent.

New Network Nebraska Website

The Network Nebraska website was launched in January. It was created by staff from the University of Nebraska Computing Services. Mr. Golden would like to receive input from members before it goes statewide.

OTHER BUSINESS

Mr. Linster announced that Wayne State, along with Network Nebraska, is hosting the NETCHE regional conference. There will be more information at a later date.

NEXT MEETING, DATE, TIME LOCATION AND ADJOURNMENT:

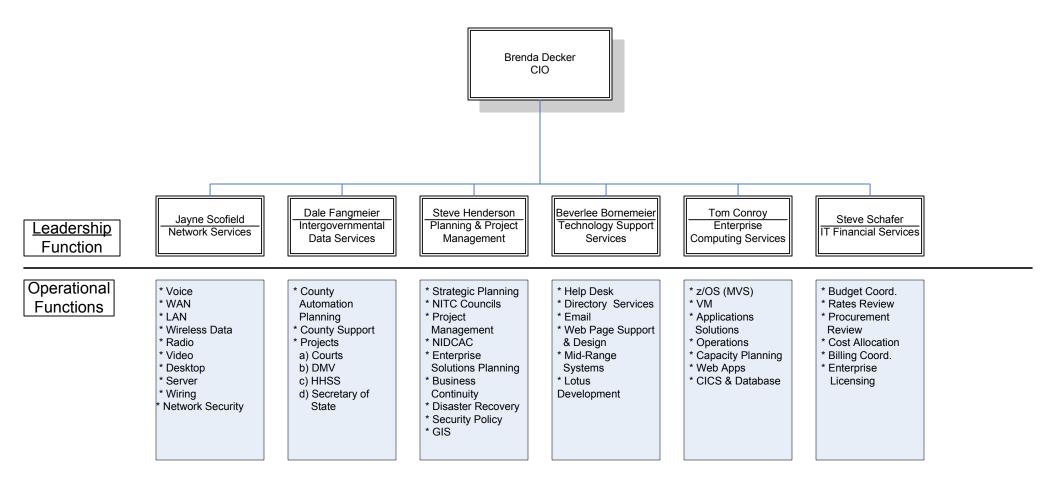
February meeting. Normally, the council would not be meeting during February but it was recommended that the council have a meeting if there is a hearing set on LB689.

March 18th: Possibly meet in Lincoln at NET building with tour of renovated facility.

May 20th: Millard will host the meeting.

With no further business, Mr. Wibbels adjourned the meeting at 11:34 a.m.

Meeting minutes were taken by Lori Lopez Urdiales and reviewed by Tom Rolfes of the Nebraska Information Technology Commission.



Nebraska Information Technology Commission

Strategic Initiatives Update

Network Nebraska
Nebraska Telehealth Network
Statewide Synchronous Video Network
Community IT Planning and Development
Nebraska e-Learning
Enterprise Architecture
E-Government
Security and Business Resumption

March 2005

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Network Nebraska

1. Develop and offer Internet I services to eligible network participants by January 10, 2005.

Status: Network Nebraska Internet service has been extended to eligible participants at a unit price approximately 50% of the October 2003 unit price. In addition, a service provider was contracted to provide redundant service out of the Omaha area. As of March 2005, an estimated 250,000 persons are being served by Network Nebraska Internet and transport services within state government, higher education, and K-12. This includes all four campuses of the University of Nebraska, two state colleges, three of the six community colleges, and all or part of the schools represented by ESUs 7, 10, 11, 15, 16, and 18.

2. Identify Tier II communities that offer opportunities for aggregation for services onto the network.

Status: Additional Tier II communities are still being considered. Wayne, Nebraska is aggregating Internet service from municipal and education entities through wireless service provided by Wayne State College. Tier II aggregation discussions have also occurred with Mid-Plains Community College in North Platte, UNK and ESU10 in Kearney, and the municipalities of Scottsbluff and Gering.

3. Create a Service Level Agreement for use by CAP and the eligible network participants no later than November 1, 2004.

Status: The Service Level Agreement has been developed and distributed to eligible network participants and suggested changes are now being reviewed.

4. Create a Network Nebraska Level 1 Helpdesk no later than November 1, 2004.

Status: Call center is up and running staffed by NET.

5. Create a Network Nebraska website no later than December 15, 2004.

Status: Network Nebraska website, <u>www.networknebraska.net</u> is posted and fully functional. Additional documents and resources are being added and linked as needed.

6. Meet with the Technical Subcommittee of the Nebraska Statewide Telehealth Network to discuss issues related to network administration and management.

Status: Ongoing.

Nebraska Statewide Telehealth Network

1. Identify options for integrating the Nebraska Telehealth Network with the statewide synchronous video network and Network Nebraska.

Status: The Nebraska Statewide Telehealth Network has formed a group to address network scheduling and is exploring the possibility of coordinating efforts with the Statewide Synchronous Video Workgroup to ensure compatibility with education.

2. Report on any changes to legislation or regulations that would impact continued support of telehealth through the Nebraska Universal Service Fund to the Community Council and Nebraska Information Technology Commission at least annually.

Status: Possible legislation affecting the Nebraska Universal Service Fund is being monitored. LB 751 introduced by Senator Foley would require the State Treasurer to transfer all funds in excess of 20 million dollars from the Nebraska Telecommunications Universal Service Fund. LB 722's Committee Amendment 442 would create a Public Infrastructure Utilization Task Force with funding of \$250,000 to \$350,000 from the Nebraska Universal Service Fund.

3. Monitor legislation, regulations, or other threats to the continued support of telehealth through the federal Universal Service Fund and update the Community Council and Nebraska Information Technology Commission at least annually.

Status: Possible legislation affecting the Universal Service Fund is being monitored. Significant changes to the Telecommunications Act of 1996 including the Nebraska Universal Service Fund are expected to be introduced.

4. Encourage continued cooperation of all entities involved in the development and management of the Nebraska Statewide Telehealth Network by facilitating meetings on specific issues as needed.

Status: No action needed.

5. Meet with the Technical Subcommittee of the Nebraska Statewide Telehealth Network to discuss issues related to network administration and management.

Status: No action taken. A meeting will be scheduled later this spring.

6. Form a subcommittee to develop a plan for future educational programming and organize at least one educational program on an issue related to the delivery and expansion of telehealth.

Status: A subcommittee has been formed. Workshops were held Sept. 10 and Feb. 18. A workshop is being planned for the Panhandle later this spring.

Statewide Synchronous Video Network

1. Identification of a single audio and video standard for low-bandwidth distance learning and videoconferencing.

Status: Completed. The NITC approved the H.263/H.264 video compression protocol and G.722, G.722.1, and G.728 audio compression protocols.

2. Development and submission of a Congressional funding request to fund upgrade of classroom and networking resources necessary to bring K-12 and higher education distance learning facilities into compliance.

Status: Congressional request of \$9.8 million was submitted on September 8, 2004. The funding request was declined.

3. Designation of a fiscal entity to oversee bidding, ordering, delivery and installation of equipment.

Status: The white paper, "Converting distance learning networks to a high bandwidth, flexible infrastructure" provides several options for bidding and procurement of equipment and services. The Distance Education Enhancement Task Force, if created as described in LB 689, would provide recommendations for this action item by December 31, 2005.

4. Equipment RFP, bidding, ordering, delivery and installation of equipment.

Status: The Distance Education Enhancement Task Force, if created as described in LB 689, would provide recommendations for this action item by December 31, 2005.

5. Research scheduling systems and enterprise resource management programs.

Status: Research continues on this action item.

6. Purchase or develop a scheduling system and/or enterprise resource management program.

Status: The Distance Education Enhancement Task Force, if created as described in LB 689, would provide recommendations for this action item by December 31, 2005. Timeframe likely to be delayed until summer 2006 at the earliest.

7. Explore options for a network operations center that assures particular qualities of service.

Status: The Distance Education Enhancement Task Force, if created as described in LB 689, would provide recommendations for this action item by December 31, 2005.

8. Development of a web-based clearinghouse that allows originators to post events and users to register for or view the date, time and frequency of individual events.

Status: The Distance Education Enhancement Task Force, if created as described in LB 689, would provide recommendations for this action item by December 31, 2005.

9. Development of training modules to accompany equipment orientation.

Status: The Distance Education Enhancement Task Force, if created as described in LB 689, would provide recommendations for this action item by December 31, 2005.

10. Research models from other states' education networks.

Status: The Distance Education Enhancement Task Force, if created as described in LB 689, would provide recommendations for this action item by December 31, 2005.

Community IT Planning and Development

1. Work with at least 6 community or regional technology committees to develop IT plans through the IT Planning and Mini Grant program

Status: Grants were awarded to Chappell, Cheyenne County, Cuming County, Hartington, Kearney, and Nemaha County. Each local committee is making significant progress on conducting community assessments.

2. Provide continuing support for the 17 community and regional technology committees which have participated in the 2002-2003 and 2003-2004 IT Planning and Mini Grant programs.

Status: Continuing support is being provided via e-mail and telephone conversations.

3. Promote technology-related development through the quarterly newsletter, TANgents.

Status: The winter issue of TANgents was published in late January 2005 and is available at http://extension.unl.edu/tangents/tangents contents1-05.htm .

4. Work with the Nebraska Rural Initiative to identify options for the expanded use of youth to assist in IT development activities.

Status: A meeting is being scheduled with the Nebraska Rural Initiative.

5. Complete an inventory of e-commerce training programs, gap analysis and recommendations for coordinating e-commerce training.

Status: Completed.

6. Develop a handout with tips for choosing a Web designer.

Status: Completed.

7. Develop an implementation plan for e-commerce coordination.

Status: The Nebraska Rural Initiative is completing an implementation plan.

Nebraska eLearning Initiative

1. Organize a series of October 2004 Planning Workshops to bring together participants who have a stake in improving educational and training opportunities for Nebraska citizens through eLearning.

Status: Six workshops were conducted between October 11 and 22, 2004. Summary documents will be posted to an Angel collaborative community site for threaded discussion among the workshop participants.

Develop a design document detailing the technology components, standards, costs and administration of a Nebraska eLearning Knowledge Repository for the sharing of educational content.

Status: In progress.

3. Work with education and staff development professionals to document strategies, techniques and tools used in course management and create a clearinghouse of eLearning best practices and training modules.

Status: In progress.

Enterprise Architecture

1. Governance and Planning

Status: Version 1.0 has been written and is ready for presentation to the State Government Council. Version 1.0 includes the topics of Governance and Planning and Business Architecture and Management Principles. Version 2.0 will focus on the technology architecture, including the topics of shared services, technology drivers and IT principles.

2. Compliance Plan

Status: The chapter on governance and planning in version 1.0 of the enterprise architecture includes a compliance strategy and the process for justifying a variance.

3. Integration Plan

Status: The chapter on governance and planning in version 1.0 of the enterprise architecture includes a discussion on integrating other processes with the enterprise architecture.

4. Technical Architecture Framework

Status: Deferred to a future version, when we have a better understanding of what is involved in developing and maintaining the enterprise architecture.

5. Technical Architecture Blueprint

Status: The chapter on Business Architecture and Management Principles version 1.0 of the enterprise architecture summarizes the important business drivers affecting technology in Nebraska. A future version will document existing inventory and defacto technology standards.

6. Enterprise licensing

Status: Enterprise agreements in place: IBM Software (ELA); IBM Hardware Maintenance (CHIS); Microsoft Software; IBM WSCA; Dell WSCA; HP WSCA; Gateway WSCA; 4 Vendors provide Temporary Information Technology Contract Help; KALOS (AS/400 hardware and software); MicroFocus (development environments); 9 Vendors provide remote PC and network support on a time and material basis. Contracts with ESRI and Oracle are pending, as are additional WSCA vendors.

7. Shared services

Status: In progress. This topic was discussed at the February State Government Council meeting and will be the focus at the March work session of the State Government Council.

E-Government

1. Work with the Secretary of State's Office to provide enhancements to election related information and services.

Status: Completed. Enhancements made for November 2004 election.

2. Work with the Accountability and Disclosure Commission to provide for secure online filings and improved access to information.

Status: Improvements to information access completed.

3. Work with the Legislature to provide additional tools to track legislative information. The Nebrask@ Online Manager is developing additional features, including the ability to track multiple bills from one location and the use of email "push" technology.

Status: Completed.

4. Work with the Department of Motor Vehicles to provide for online vehicle registration and drivers license renewal. DMV is in the process of implementing two systems – insured motorists database and digital drivers license system – which will allow for the future deployment of these online services

Status: No change.

5. Work with the Nebrask@ Online Manager and county officials to provide the means for online payment of property taxes and other local fees.

Status: State Records Board grant application submitted for a pilot project with six counties.

6. Prepare a comprehensive strategy for online licensing of regulated professionals.

Status: Work ongoing, to be posted. Online filing on hold.

Working with the various agencies involved in business registration –
including the Secretary of State, Department of Revenue, and Department of
Labor – create an online system for business registration.

Status: Work group established. Analysis underway by NOL and agencies.

8. Prepare a report on the barriers and options for providing online access to certain, limited, criminal history information.

Status: On hold.

9. Develop an online application for use by businesses attempting to find a suitable site for business development.

Status: No change.

10. Improve the business forms database maintained by NOL and enhance the search capabilities.

Status: Work on application completed, work on data is ongoing.

11. Under sponsorship of the Education Council of the NTIC, The Nebrask@ Online Manager will work with the Education Council educational institutions to provide enhancements to the Education Portal, including but not limited to an Information Technology training calendar; searchable database of educational courses, degrees, and programs; and statewide application for admission to higher education institutions.

Status: Information Technology Training Calendar under development; Searchable Database project terminated, no plan to continue, another source provides similar information; Statewide Application for Admission, project terminated, no plan to continue.

12. The Department of Education is developing online teacher/administrator certification.

Status: Completed.

13. Develop strategies to address intergovernmental cooperation groups; integration of government information and services; the development of a local government portal; and forms automation.

Status:

Intergovernmental Collaboration Groups: The Juvenile Data Sharing Work Group (created by CJIS and SGC) sponsored a study to prepare a strategic plan for data sharing among entities providing services to children. That study will be finished in March 2005. The Steering Committee on Child Abuse and Neglect Information Exchanges prepared an interim report in October that recommended six short-term projects. MOAs for those projects have been signed (except for one) and those projects are now getting underway. Further information is available at: http://cio.nol.org/CTF/. In January, the Office of the CIO submitted an application to the National Governor's Association for a \$50,000 grant to conduct a pilot project for using Global XML technology to enable existing systems to exchange data on child abuse cases. Nebraska's project is one of six out of 21 proposals, which was approved. We are waiting for the contract from NGA before initiating work.

Local Government Portal: On schedule to be incorporated into overall NOL site redesign currently planned for June 2005.

Integration of Government Information and Services: A steering committee is working on integrating the information system needs of the Foster Care Review Board into the NFOCUS system maintained by HHS.

14. The State Government Council will identify specific improvements and value-added services to be incorporated into the state employee portal, Nebrask@ Online for State Employees (www.nebraska.gov/employee/).

Status: No change.

15. Develop a marketing strategy to increase public awareness and the use of egovernment services.

Status: A meeting was held with agency PIOs on October 1 to explore different strategies for marketing. NOL has hired a marketing director. NOL is developing recommendations for the next State Records Board meeting.

16. Prepare draft standards for all agency home pages to include privacy and security statements.

Status: Webmasters Work Group developed draft standard under review by the State Government Council. Draft security statement to be reviewed by the State Government Council and State Records Board.

17. The SGC will work with other entities to investigate ways of providing authentication, especially for first time encounters with users.

Status: No change.

Security and Business Resumption

Security

1. Request funding for the CIO to contract for security audits.

Status: Completed.

2. Investigate opportunities for aggregating efforts of several state agencies that face federal requirements for security audits.

Status: Working with agencies.

3. Prepare RFP and Scope of Work.

Status: RFP underdevelopment, to be released Spring/Summer 2005.

4. Conduct 2005 Security Audit.

Status: Pending release of RFP.

5. Establish an authentication standard to be submitted to the NITC to seek approval by the March 2005 meeting.

Status: Completed.

6. Implement the Content Management structure for all agencies.

Status: Work underway.

7. Propose two-factor authentication standard to NITC Directory Workgroup and State Government Council.

Status: Timeline to be revised.

8. Provide Web-Based Single sign-on (WSSO) guideline to any client/application that desires it.

Status: Timeline to be revised.

9. Review incident reporting procedures to determine need for changes in what is reported and the reporting requirements.

Status: Completed. The Division of Communications is developing an incident reporting process.

10. Communicate reporting requirements to agencies.

Status: Pending completion of previous item.

11. Configure all public state IP addresses (164.119) behind the state's firewall complex.

Status: Completed.

12. Implement an intrusion detection and prevention system on the State's Internet connection as a part of a layered defense.

Status: On schedule.

13. Investigate and recommend an enterprise solution to ensure that encrypted traffic adheres to State security requirements.

Status: On schedule.

14. Evaluate and recommend options for providing encryption to clients across the state's Wide Area Network.

Status: On schedule.

Business Resumption

15. Conduct an "executive overview" briefing (orientation exercise) to state agencies (using either the State Government Council or the Security Work Group as a forum) explaining the progress and current and future activities in the development of disaster recovery plans.

Status: Pending completion of DAS contract with vendor.

16. Encourage agencies to develop agency business continuity plans and disaster plans for information technology by seeking funding sources, providing training on developing plans, and providing technical assistance. The focus should be at the business level.

Status: Pending completion of action item 15 above.

17. Identify and develop procedures for common elements that should be addressed in all or most business continuity plans and disaster recovery plans for information technology.

Status: Pending completion of action item 15 above.

18. Develop a shared recovery capacity serving state government and the University of Nebraska.

Status: Initial hardware and communications capabilities in place. Additional implementation work ongoing.

19. Conduct a briefing for state agency information technology staff (orientation exercise) describing the disaster recovery activities that will be performed by IMServices and the disaster recovery testing that has been completed.

Status: On time.

20. Evaluate current status of testing and recommend testing strategies for different kinds of systems.

Status: DAS performed a "table-top" disaster recovery exercise in October 2004. In November 2004, NEMA sponsored a statewide table-top exercise. A NEMA-sponsored DAS exercise is scheduled in April 2005.

NITC Education Council Meeting Friday, January 21, 2005

RE: Draft motion concerning the membership of the Distance Education Enhancement Task Force, as detailed in LB 689 (Stuhr/Raikes), 99th Legislature, First Session.

On the matter of LB 689, creating a Distance Education Enhancement Task Force,

Ed Rastovski moved, and Jeff Johnson seconded, to recommend to the NITC that they ask the Legislature's Education Committee to consider broadening the Distance Education Enhancement Task Force membership to include the following members, as nominated by their respective professional associations: a public school teacher or representative (Nebraska State Education Association), private/parochial teacher or representative (Nebraska Council of American Private Education), school administrator or representative (Nebraska Council of School Administrators), and a school board member or representative (Nebraska Association of School Boards), one of whom who is proficient in assistive and accessible technologies; and also to broaden the higher education membership to include one representative each from the community college, state college, University of Nebraska, and private/independent college sectors.

All were in favor. The motion passed unanimously. Voting yes were Al Schneider, ESU 5; Arnold Bateman, UNL; Dennis Baack, Community College System; Linda Engel, Nebraska City Public Schools; Terry Haack, Bennington Public Schools; Yvette Holly, UN Medical Center; Jeff Johnson, Centennial Public Schools; Joe LeDuc, Lincoln Diocese Catholic Schools; Dennis Linster, Wayne State College; Mike Pate, Millard Public Schools; Ed Rastovsky, Wahoo Public Schools; Chuck Lenosky, Creighton University; Robin Smith, Chadron State College; Alan Wibbels; ESU 10.

Discussion by the Education Council acknowledged the potential danger of creating a task force so large that it is unmanageable. However, the Education Council members emphasized that the recommendations of the Distance Education Enhancement Task Force may be so important and far-reaching for the future of distance education in Nebraska, that it is critical to have "buy-in" from every major sector of education, prior to funding and implementation. One of the ways to achieve "buy-in" is to have every sector at the table for discussion and input.

Recorded by Tom Rolfes, Education I.T. Manager, Office of the CIO/NITC, <u>trolfes@cio.state.ne.us</u>, 402-471-7969.

LEGISLATURE OF NEBRASKA

NINETY-NINTH LEGISLATURE

FIRST SESSION

LEGISLATIVE BILL 467

Introduced by Byars, 30

Read first time January 13, 2005

Committee: Education

A BILL

1	FOR AN	ACT relating to schools; to amend sections 79-728, 79-761,
2		79-809, 79-810, 79-8,136, 79-1101, 79-1103, 79-1142,
3		79-1144, and 79-1310, Reissue Revised Statutes of
4		Nebraska, and section 9-812, Revised Statutes Supplement,
5		2004; to adopt the Creating Essential Educational
6		Opportunities for All Students Act; to change provisions
7		relating to allocation of state lottery funds; to create
8		the Beginning Teacher Mentoring and Induction Program; to
9		change provisions relating to kindergarten programs,
10		mentor teacher programs, fees, early childhood education
11		grants, and special education funding; to create a fund;
12		to eliminate the Excellence in Education Council and
13		provisions relating to school technology funding and the
14		School Technology Fund; to harmonize provisions; to
15		repeal the original sections; and to outright repeal
16		section 79-1328, Reissue Revised Statutes of Nebraska.

¹⁷ Be it enacted by the people of the State of Nebraska,

1 Section 1. Sections 1 to 9 of this act shall be known

- 2 and may be cited as the Creating Essential Educational
- 3 Opportunities for All Students Act.
- 4 Sec. 2. The Legislature finds:
- 5 (1) That the goal of the State of Nebraska is that all
- 6 elementary and secondary school students in Nebraska should have
- 7 equitable opportunities to obtain an essential education; and
- 8 (2) An essential education is obtained when students are
- 9 (a) proficient in meeting the academic content standards set by the
- 10 State Board of Education pursuant to sections 79-760 to 79-760.02,
- 11 (b) successful at each educational level and in making transitions
- 12 between educational levels from early childhood education through
- 13 postsecondary education or career entry, and (c) effective in
- 14 functioning in and contributing to our culturally diverse and
- 15 democratic society.
- 16 Sec. 3. The Legislature adopts the following principles
- 17 to meet the goal stated in section 2 of this act:
- 18 (1) The Legislature and the State Department of Education
- 19 set the policies and standards for Nebraska schools;
- 20 (2) Each student in Nebraska should be able to attend
- 21 school in a school district that provides a curriculum for students
- 22 in prekindergarten through grade twelve;
- 23 (3) School districts are political subdivisions created
- 24 by the Legislature and are accountable to the Legislature and the
- 25 State Department of Education for reporting their performance;
- 26 (4) Schools boards are responsible for determining how
- 27 best to provide integrated, planned curriculum to students in their
- 28 school districts based upon the standards set by the Legislature

- 1 and the State Department of Education;
- 2 (5) Schools are created by school boards as places where
- 3 instruction occurs, and their existence depends upon their capacity
- 4 to provide an essential education;
- 5 (6) School boards must have the authority and resources
- 6 to provide an essential education to students in a learning
- 7 environment that is safe, clean, and supportive;
- 8 (7) Highly qualified teachers and staff are necessary to
- 9 meet the needs of all students;
- 10 (8) A comprehensive plan of support programs and services
- 11 is necessary to meet the needs of the diverse students in the State
- 12 of Nebraska; and
- 13 (9) The vast geographic area and the sparse population in
- 14 some areas of Nebraska require that regional support services be
- 15 available to assist school districts in achieving the goal stated
- 16 in section 2 of this act through implementation of policies set by
- 17 the Legislature and the department.
- 18 Sec. 4. It is the intent of the Legislature to
- 19 appropriate one million five hundred thousand dollars annually to
- 20 the State Department of Education in order to provide the
- 21 department with the capacity to (1) consult with and provide
- 22 technical assistance to school districts for essential education,
- 23 (2) provide technical assistance for low-performing school
- 24 districts, (3) provide leadership, support, and technical
- 25 assistance for strategic initiatives to address students who are
- 26 English language learners and students challenged by poverty,
- 27 mobility impairments, and other special needs, (4) provide training
- 28 and technical assistance to regional entities described in section

1 5 of this act, and (5) provide mentoring for new principals,

- 2 superintendents, and school board members.
- 3 Sec. 5. The State Department of Education may contract
- 4 with regional entities, including, but not limited to, educational
- 5 service units and postsecondary educational institutions, to
- 6 provide regional support services to school districts in the
- 7 implementation of standards, assessments, and school improvement.
- 8 It is the intent of the Legislature to appropriate five million
- 9 dollars annually to the department to carry out this section.
- 10 Sec. 6. The State Department of Education shall
- 11 establish a program of grants to assist school districts identified
- 12 by the department as low-performing districts. School districts
- 13 may apply to the department on or before February 1 of each year
- 14 beginning with school year 2005-06 to receive funding to address
- 15 areas of low performance. An application by a school district
- 16 shall identify (1) specific weaknesses in its assessment system or
- 17 student performance and the identification of proven strategies to
- 18 improve any identified weaknesses, (2) training needed for teachers
- 19 or administrators to improve assessments or student performance,
- 20 (3) consultants or experts needed to assist with improving
- 21 assessments or student performance, and (4) the use of other school
- 22 districts, educational service units, or postsecondary educational
- 23 institutions to assist with improving assessments or student
- 24 performance. The State Board of Education shall set priorities for
- 25 the awarding of grants on or before February 1 of each year. The
- 26 department shall notify each successful applicant by March 1 of
- 27 each year of the award of a grant and the amount. It is the intent
- 28 of the Legislature to appropriate one million dollars annually to

- 1 the department to carry out this section.
- Sec. 7. (1) The Highly Qualified Teacher Program is
- 3 created. The purpose of the program is to provide each Nebraska
- 4 child with a highly qualified teacher as determined by the State
- 5 Board of Education. The State Department of Education shall
- 6 administer the program.
- 7 (2) Any teacher who is regularly employed by a school
- 8 district, educational service unit, or school operated by the State
- 9 of Nebraska may qualify for reimbursement for tuition and mandatory
- 10 fees paid and the cost of required textbooks purchased for
- 11 coursework leading to college credit earned after September 1,
- 12 2005, at any standard institution of higher education, as defined
- 13 in section 79-807, in Nebraska. The maximum tuition reimbursement
- 14 shall not exceed the highest per-credit-hour tuition charged by a
- 15 Nebraska public postsecondary educational institution. The
- 16 reimbursement shall be limited to expenditures listed in this
- 17 subsection for coursework to (a) prepare the teacher to develop
- 18 assessments under section 79-760, (b) obtain an endorsement in the
- 19 area of teaching to which the teacher is assigned, (c) obtain
- 20 additional college credits in the area of teaching to which the
- 21 teacher is assigned, and (d) obtain an additional endorsement.
- 22 (3) After completion of nine credit hours of coursework,
- 23 a teacher may submit a request for reimbursement to the department
- 24 which shall include, but not be limited to, a transcript of
- 25 coursework completed, a statement of tuition and any mandatory fees
- 26 paid by the teacher, and the cost of required textbooks purchased.
- 27 Any teacher who receives reimbursement under the program shall
- 28 agree in writing to continue teaching in Nebraska in a school

1 district, educational service unit, or school operated by the State

- 2 of Nebraska for a period of one year for each nine credit hours for
- 3 which reimbursement is provided. Any reimbursement received by a
- 4 teacher shall not be subject to state withholding or income tax.
- 5 (4) If a teacher fails to continue teaching as required
- 6 in subsection (3) of this section, the teacher shall repay to the
- 7 department any reimbursement received plus interest at the rate
- 8 fixed pursuant to section 45-103.
- 9 Sec. 8. (1) On or before September 30, 2006, and on or
- 10 before September 30 of each school year thereafter, every
- 11 certificated teacher employed by a school district, educational
- 12 service unit, or state-operated school offering educational
- 13 programs in elementary or high school grades may elect to extend
- 14 his or her standard teaching contract for up to three additional
- 15 days each year for the purpose of allowing the teacher to perform
- 16 work associated with standards, assessment, accountability, and
- 17 school improvement.
- 18 (2) The school board, educational service unit board, or
- 19 governing authority of any state-operated school shall determine
- 20 how teachers employed by the board or governing authority may use
- 21 extended contract days for the purpose of allowing the teacher to
- 22 perform work associated with standards, assessment, accountability,
- 23 and school improvement. The school board, educational service unit
- 24 board, or governing authority of the state-operated school shall
- 25 report to the State Department of Education on or before October 31
- 26 of each year the number of teachers electing to extend their
- 27 contracts and the amount of funding needed pursuant to subsection
- 28 (3) of this section. If sufficient funding has not been provided

1 by the Legislature, the department shall submit a deficit

- 2 appropriation request to the Legislature to provide additional
- 3 funding to meet the requests of school districts, educational
- 4 service units, or the governing authority of any state-operated
- 5 school.
- 6 (3) A teacher electing to extend his or her standard
- 7 teaching contract as provided in this section shall be compensated
- 8 at a per diem rate of pay calculated by dividing his or her
- 9 standard teaching salary by one hundred eighty-five and multiplying
- 10 that amount by the number of extended contract days the teacher
- 11 elects, not to exceed three. The teacher shall receive
- 12 compensation in a lump sum for the extended contract days as soon
- 13 as the district, educational service unit, or state-operated school
- 14 receives funds from the department for such purpose.
- 15 (4) Implementation of this section shall be a negotiable
- 16 term or condition of employment pursuant to the Industrial
- 17 Relations Act and the State Employees Collective Bargaining Act.
- 18 Sec. 9. The department may adopt and promulgate rules
- 19 and regulations to carry out the Creating Essential Educational
- 20 Opportunities for All Students Act.
- 21 Sec. 10. Section 9-812, Revised Statutes Supplement,
- 22 2004, is amended to read:
- 9-812. (1) All money received from the operation of
- 24 lottery games conducted pursuant to the State Lottery Act in
- 25 Nebraska shall be credited to the State Lottery Operation Trust
- 26 Fund, which fund is hereby created. All payments of expenses of
- 27 the operation of the lottery games shall be made from the State
- 28 Lottery Operation Cash Fund. In accordance with legislative

appropriations, money for payments for expenses of the division 1 2 shall be transferred from the State Lottery Operation Trust Fund to 3 the State Lottery Operation Cash Fund, which fund is hereby 4 created. All money necessary for the payment of lottery prizes 5 shall be transferred from the State Lottery Operation Trust Fund to 6 the State Lottery Prize Trust Fund, which fund is hereby created. 7 The amount used for the payment of lottery prizes shall not be less 8 than forty percent of the dollar amount of the lottery tickets 9 which have been sold. The State Treasurer shall transfer five 10 million dollars from the State Lottery Operation Trust Fund to the 11 General Fund within fifteen days after July 1, 2004. Until October 12 1, 2003, at least twenty five percent and beginning October 1, 13 2003, and until January 1, 2008 Prior to July 1, 2006, a portion of 14 the dollar amount of the lottery tickets which have been sold on an annualized basis shall be transferred from the State Lottery 15 16 Operation Trust Fund to the Education Innovation Fund, the Nebraska 17 Scholarship Fund, the Nebraska Environmental Trust Fund, and the 18 Compulsive Gamblers Assistance Fund, except that the dollar amount 19 transferred shall not be less than the dollar amount transferred to 20 the funds in fiscal year 2002-03. On and after January 1, 2008 21 July 1, 2006, at least twenty-five percent of the dollar amount of 22 the lottery tickets which have been sold on an annualized basis 23 shall be transferred from the State Lottery Operation Trust Fund to 24 the Education Innovation Fund, the Nebraska Scholarship Fund, the Nebraska Environmental Trust Fund, and the Compulsive Gamblers 25 26 Assistance Fund. Of the money available to be transferred to the 27 Education Innovation Fund, the Nebraska Scholarship Fund, the 28 Nebraska Environmental Trust Fund, and the Compulsive Gamblers

Assistance Fund, the first five hundred thousand dollars shall be 1 2 transferred to the Compulsive Gamblers Assistance Fund to be used 3 as provided in section 71-817. Twenty-four and three-fourths 4 percent of the money remaining after the payment of prizes and 5 operating expenses and the initial transfer to the Compulsive 6 Gamblers Assistance Fund shall be transferred to the Education 7 Innovation Fund. Twenty-four and three-fourths percent of the 8 money remaining after the payment of prizes and operating expenses 9 and the initial transfer to the Compulsive Gamblers Assistance Fund 10 shall be transferred to the Nebraska Scholarship Fund. Forty-nine and one-half percent of the money remaining after the payment of 11 12 prizes and operating expenses and the initial transfer to the 13 Compulsive Gamblers Assistance Fund shall be transferred to the 14 Nebraska Environmental Trust Fund to be used as provided in the 15 Nebraska Environmental Trust Act. One percent of the money 16 remaining after the payment of prizes and operating expenses and 17 the initial transfer to the Compulsive Gamblers Assistance Fund shall be transferred to the Compulsive Gamblers Assistance Fund to 18 19 be used as provided in section 71-817.

20 (2) The Education Innovation Fund is hereby created. 21 least seventy-five percent of the lottery proceeds allocated to the 22 Education Innovation Fund shall be available for disbursement. For 23 each fiscal year except fiscal years 2003 04, 2004 05, 2005 06, and 24 2006-07 after FY2005-06, the Education Innovation Fund shall be 25 allocated in the following manner: Up to twenty percent to fund 26 the mentor teacher program pursuant to the Quality Education 27 Accountability Act; up to forty percent to the Attracting 28 Excellence to Teaching Program Cash Fund to fund the Attracting

Excellence to Teaching Program Act; and up to forty percent of the fund shall be allocated by the Governor. For fiscal years 2003-04 and 2004-05, the Education Innovation Fund shall be allocated to the General Fund after operating expenses for the Excellence in Education Council are deducted. For fiscal years 2005-06 and 2006-07, the Education Innovation Fund shall be allocated as follows: The to the Beginning Teacher Mentoring and Induction Program described in section 79-761, except that for FY2005-06 and FY2006-07, the first one million dollars each fiscal year allocated to the Education Innovation Fund shall be transferred to the School District Reorganization Fund. 7 and the remaining amount shall be allocated to the General Fund after operating expenses for the Excellence in Education Council are deducted.

At the direction of the budget administrator of the Department of Administrative Services, the State Treasurer shall transfer available unobligated balances existing in the Education Innovation Fund to the General Fund on or before July 15, 2005, in such amounts as determined by the budget administrator, to include: Any unobligated money remaining as of June 30, 2004, and June 30, 2005, in the Education Innovation Fund, appropriated for the Excellence in Education Council; investment income credited to the fund; and unobligated grant fund money returned to the state for credit to the Education Innovation Fund.

Allocations by the Governor shall be through incentive grants to encourage the development of strategic school improvement plans by school districts for accomplishing high performance learning and to encourage schools to establish innovations in programs or practices that result in restructuring of school

organization, school management, and instructional programs which
bring about improvement in the quality of education. Such

3 incentive grants allocated by the Governor are intended to provide

4 selected school districts, teachers or groups of teachers,

5 nonprofit educational organizations, educational service units, or

cooperatives funding for the allowable costs of implementing pilot

7 projects and model programs.

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From the funds allocated by the Governor, minigrants shall be available to school districts to support the development of strategic school improvement plans which shall include statements of purposes and goals for the districts. The plans shall also include the specific statements of improvement or strategic initiatives designed to improve quality learning for every student.

In addition to the minigrants granted for the development of strategic school improvement plans, school districts with annual budget expenditures of three hundred fifty thousand dollars or less are eligible for minigrants from the funds allocated by the Governor for the purposes allowed in subdivisions (2)(a) through (q) of this section. The amount of this type of minigrant shall not exceed five thousand dollars. The school district shall present a curriculum support plan with its application for the The curriculum support plan must show how the district is grant. working to achieve one or more of the allowed purposes and how the grant will be used to directly advance the plan to achieve one or more of these purposes. The plan must be signed by the school administrator and a school board representative. The application for the grant shall be brief. The Excellence in Education Council

1 shall select the recipients of this type of minigrant and shall

- 2 administer such minigrants.
- 3 From the funds allocated by the Governor, major
- 4 competitive grants shall be available to support innovative
- 5 programs which are directly related to the strategic school
- 6 improvement plans. The development of a strategic school
- 7 improvement plan by a school district shall be required before a
- 8 grant is awarded. Annual reports shall be made by program
- 9 recipients documenting the effectiveness of the program in
- 10 improving the quality of education as designed in the strategic
- 11 school improvement plans. Special consideration shall be given to
- 12 plans which contain public or private matching funds and
- 13 cooperative agreements, including agreements for in kind services.
- 14 Purposes for which such major competitive grants would be offered
- 15 shall include:
- 16 (a) Professional staff development programs to provide
- 17 funds for teacher and administrator training and continuing
- 18 education to upgrade teaching and administrative skills;
- 19 (b) The development of strategic school improvement plans
- 20 by school districts;
- 21 (c) Educational technology assistance to public schools
- 22 for the purchase and operation of computers, telecommunications
- 23 equipment and services, and other forms of technological innovation
- 24 which may enhance classroom teaching, instructional management, and
- 25 districtwide administration. Telecommunications equipment,
- 26 services, and forms of technical innovation shall be approved only
- 27 after review by the technical panel created in section 86-521;
- 28 (d) An educational accountability program to develop an

1 educational indicators system to measure the performance and

- 2 outcomes of public schools and to ensure efficiency in operations;
- 3 (e) Alternative programs for students, including
- 4 underrepresented groups, at-risk students, and dropouts;
- 5 (f) Programs that demonstrate improvement of student
- 6 performance against valid national and international achievement
- 7 standards;
- 8 (g) Early childhood and parent education which emphasizes
- 9 child development;
- 10 (h) Programs using decisionmaking models that increase
- 11 involvement of parents, teachers, and students in school
- 12 management;
- 13 (i) Increased involvement of the community in order to
- 14 achieve increased confidence in and satisfaction with its schools;
- 15 (j) Development of magnet or model programs designed to
- 16 facilitate desegregation;
- 17 (k) Programs that address family and social issues
- 18 impairing the learning productivity of students;
- 19 (1) Programs enhancing critical and higher order thinking
- 20 capabilities;
- 21 (m) Programs which produce the quality of education
- 22 necessary to guarantee a competitive work force;
- 23 (n) Programs designed to increase productivity of staff
- 24 and students through innovative use of time;
- 25 (o) Training programs designed to benefit teachers at all
- 26 levels of education by increasing their ability to work with
- 27 educational technology in the classroom;
- 28 (p) Approved accelerated or differentiated curriculum

- 1 programs under sections 79-1106 to 79-1108.03; and
- 2 (q) Programs for children from birth to age twenty-one
- 3 years with disabilities receiving special education under the
- 4 Special Education Act and children from birth to age twenty-one
- 5 years needing support services as defined in section 79 1125.01,
- 6 which programs demonstrate improved outcomes for children from
- 7 birth to age twenty-one years through emphasis on prevention and
- 8 collaborative planning.
- 9 The Governor shall establish the Excellence in Education
- 10 Council. The Governor shall appoint eleven members to the council
- 11 including representatives of educational organizations,
- 12 postsecondary educational institutions, the business community, and
- 13 the general public, members of school boards and parent education
- 14 associations, school administrators, and at least four teachers who
- 15 are engaged in classroom teaching. The State Department of
- 16 Education shall provide staff support for the council to administer
- 17 the Education Innovation Fund, including the Quality Education
- 18 Accountability Act. The council shall have the following powers
- 19 and duties:
- 20 (i) In consultation with the department, develop and
- 21 publish criteria for the awarding of incentive grants allocated by
- 22 the Governor for programs pursuant to this subsection, including
- 23 minigrants;
- 24 (ii) Provide recommendations to the Governor regarding
- 25 the selection of projects to be funded and the distribution and
- 26 duration of project funding;
- 27 (iii) Establish standards, formats, procedures, and
- 28 timelines for the successful implementation of approved programs

1 funded by incentive grants allocated by the Governor from the

- 2 Education Innovation Fund;
- 3 (iv) Assist school districts in determining the
- 4 effectiveness of the innovations in programs and practices and
- 5 measure the subsequent degree of improvement in the quality of
- 6 education;
- 7 (v) Consider the reasonable distribution of funds across
- 8 the state and all classes of school districts;
- 9 (vi) Carry out its duties pursuant to the Quality
- 10 Education Accountability Act; and
- 11 (vii) Provide annual reports to the Governor concerning
- 12 programs funded by the fund. Each report shall include the number
- 13 of applicants and approved applicants, an overview of the various
- 14 programs, objectives, and anticipated outcomes, and detailed
- 15 reports of the cost of each program.
- 16 To assist the council in carrying out its duties, the
- 17 State Board of Education shall, in consultation with the council,
- 18 adopt and promulgate rules and regulations establishing criteria,
- 19 standards, and procedures regarding the selection and
- 20 administration of programs funded from the Education Innovation
- 21 Fund, including the Quality Education Accountability Act.
- 22 (3) Recipients of incentive grants allocated by the
- 23 Governor from the Education Innovation Fund shall be required to
- 24 provide, upon request, such data relating to the funded programs
- 25 and initiatives as the Governor deems necessary.
- 26 (4) (3) Any money in the State Lottery Operation Trust
- 27 Fund, the State Lottery Operation Cash Fund, the State Lottery
- 28 Prize Trust Fund, or the Education Innovation Fund available for

1 investment shall be invested by the state investment officer

- 2 pursuant to the Nebraska Capital Expansion Act and the Nebraska
- 3 State Funds Investment Act.
- 4 (5) (4) Unclaimed prize money on a winning lottery ticket
- 5 shall be retained for a period of time prescribed by rules and
- 6 regulations. If no claim is made within such period, the prize
- 7 money shall be used at the discretion of the Tax Commissioner for
- 8 any of the purposes prescribed in this section.
- 9 Sec. 11. Section 79-728, Reissue Revised Statutes of
- 10 Nebraska, is amended to read:
- 11 79-728. All Class I, II, III, IV, and V school
- 12 districts, shall offer a kindergarten program.
- 13 Not later than the beginning of school year 2010-11, all
- 14 school districts maintaining elementary grades shall offer a
- 15 full-day kindergarten program.
- 16 Sec. 12. Section 79-761, Reissue Revised Statutes of
- 17 Nebraska, is amended to read:
- 18 79-761. (1) The Beginning Teacher Mentoring and
- 19 Induction Program is created to promote excellence in teaching,
- 20 enhance student achievement, and increase the retention of
- 21 beginning teachers who are in their first three years of teaching.
- 22 (2) Beginning with school year 2006-07, each school
- 23 district shall require that all beginning teachers participate in
- the program.
- 25 (3) A school district shall receive funding from the
- 26 program if the school board applies to the State Department of
- 27 Education in the manner prescribed by the department by August 1
- 28 for the following school year and meets the requirements set by the

1 State Board of Education. Payments made pursuant to the program

- 2 shall be included as part of the formula need calculation pursuant
- 3 to section 79-1007.02 beginning with school fiscal year 2010-11.
- 4 (4) Funds received by a school district pursuant to the
- 5 program shall be used to pay (a) five hundred dollars per semester
- 6 to each mentor provided under subsection (5) of this section who
- 7 fully participates in the program, (b) for training of mentors and
- 8 administrators to implement the program, the evaluation process,
- 9 and the criteria upon which the beginning teacher shall be
- 10 evaluated, and (c) for provision of professional development to
- 11 beginning teachers by educational service units or standard
- 12 institutions of higher education as defined in section 79-807.
- 13 (5) The State Board of Education shall develop guidelines
- 14 for mentor teacher programs in local systems establish criteria and
- 15 standards for the program in order to provide ongoing support for
- 16 individuals entering the teaching profession. Funding for mentor
- 17 teacher programs the program shall be provided to local systems
- 18 school districts which provide each first year beginning teacher in
- 19 $\frac{1}{2}$ the local system with a mentor. The mentor teacher programs
- 20 program shall be funded by the Education Innovation Fund pursuant
- 21 to subsection (2) of section 9-812. and shall identify criteria
- 22 for selecting excellent, experienced, and qualified teachers to be
- 23 participants. The state board shall report to the Legislature on
- 24 or before December 1, 1998, on its progress in implementing this
- 25 section.
- 26 Sec. 13. Section 79-809, Reissue Revised Statutes of
- 27 Nebraska, is amended to read:
- 28 79-809. In addition to the requirements in section

1 79-808, the maximum which the board may require for the issuance of

- 2 any entry-level certificate or permit shall be that the applicant
- 3 (1) has a baccalaureate degree that qualifies for a certificate to
- 4 teach, (2) has satisfactorily completed, within two years of the
- 5 date of application, an approved program at a standard institution
- 6 of higher education, (3) has satisfactorily demonstrated basic
- 7 skills competency, (4) has special education training, (5) has
- 8 earned college credit in an approved program, at a standard
- 9 institution of higher education, for which endorsement is sought,
- 10 and (6) has paid a nonrefundable fee to the department of up to
- 11 forty five fifty-five dollars for issuance of a certificate or
- 12 permit valid in all schools or up to thirty forty dollars for
- 13 issuance of a certificate or permit valid only in nonpublic
- 14 schools.
- 15 Sec. 14. Section 79-810, Reissue Revised Statutes of
- 16 Nebraska, is amended to read:
- 17 79-810. (1) Certificates and permits shall be issued by
- 18 the commissioner upon application on forms prescribed and provided
- 19 by him or her which shall include the applicant's social security
- 20 number.
- 21 (2) Each certificate or permit issued by the commissioner
- 22 shall indicate the area of authorization to teach, provide special
- 23 services, or administer and any areas of endorsement for which the
- 24 holder qualifies. During the term of any certificate or permit
- 25 issued by the commissioner, additional endorsements may be made on
- 26 the certificate or permit if the holder submits an application,
- 27 meets the requirements for issuance of the additional endorsements,
- 28 and pays a nonrefundable fee of thirty dollars.

(3) The Certification Fund is created. Any fee received 1 2 by the department under sections 79-806 to 79-815 shall be remitted 3 State Treasurer for credit to the fund. The fund shall be 4 used by the department in paying the costs of certifying educators 5 pursuant to such sections and to carry out subsection (3) of 6 section 79-808, except that thirteen dollars of the 7 forty-five-dollar fifty-five-dollar fee specified in subdivision 8 (6) of section 79-809 for certificates or permits valid in all 9 schools shall be credited to the Professional Practices Commission 10 Fund which is created for use by the department to pay for the 11 provisions of sections 79-859 to 79-871. Any money in the 12 Certification Fund or the Professional Practices Commission Fund 13 available for investment shall be invested by the state investment 14 officer pursuant to the Nebraska Capital Expansion Act and the 15 Nebraska State Funds Investment Act. The State Treasurer shall 16 transfer any money in the Teachers! Certification Fund on May 27, 17 2003, to the Certification Fund on such date. 18 Sec. 15. Section 79-8,136, Reissue Revised Statutes of 19 Nebraska, is amended to read: 20 79-8,136. The Attracting Excellence to Teaching Program

21 Cash Fund is created. The fund shall consist of appropriations by 22 the Legislature, transfers pursuant to section 9-812, and loan 23 repayments, penalties, and interest payments received in the course 24 of administering the Attracting Excellence to Teaching Program. 25 The department shall allocate on an annual basis the funds to be 26 distributed for the program to all eligible institutions according 27 to the distribution formula as determined by rule and regulation. 28 7 except that the State Treasurer shall transfer the cash balance

1 existing on November 9, 2001, in the fund to the General Fund

- 2 within five days after November 9, 2001. The eligible institutions
- 3 shall act as agents of the department in the distribution of the
- 4 funds to eligible students. Any money in the Attracting Excellence
- 5 to Teaching Program Cash Fund available for investment shall be
- 6 invested by the state investment officer pursuant to the Nebraska
- 7 Capital Expansion Act and the Nebraska State Funds Investment Act.
- 8 Sec. 16. Section 79-1101, Reissue Revised Statutes of
- 9 Nebraska, is amended to read:
- 10 79-1101. (1) The Legislature finds and declares that:
- 11 (a) Early childhood education programs can assist children in
- 12 achieving their potential as citizens, workers, and human beings
- 13 and can strengthen families; (b) early childhood education has been
- 14 proven to be a sound public investment of funds not only in
- 15 assuring productive, taxpaying workers in the economy but also in
- 16 avoidance of increasingly expensive social costs for those who drop
- 17 out as productive members of society; (c) the key ingredient in an
- 18 effective early childhood education program is a strong family
- 19 development and support component because the role of the parent is
- 20 of critical importance; (d) while all children can benefit from
- 21 quality, developmentally appropriate early childhood education
- 22 experiences, such experiences are especially important for at-risk
- 23 infants and children; (e) current early childhood education
- 24 programs serve only a fraction of Nebraska's children and the
- 25 quality of current programs varies widely; (f) well-designed early
- 26 childhood education programs increase the likelihood that children
- 27 who participate will enter school prepared to achieve high
- 28 standards; (g) effective early childhood education programs require

1 staff with knowledge about child growth, development, and learning

- 2 and family systems; and (h) both public and nonpublic programs
- 3 which meet recognized standards of quality can address the growth,
- 4 development, and learning needs of young children.
- 5 (2) It is the intent of the Legislature and the public 6 policy of this state to encourage schools and community-based 7 organizations to work together to provide high-quality early 8 childhood education programs for infants and young children which 9 include family involvement. In addition, it is the intent of the 10 Legislature that by September 1, 2010, all at-risk children four 11 years of age or older will be able to enroll in early childhood 12 education programs and that school districts that have received 13 grant funding for early childhood education programs pursuant to section 79-1103 for three consecutive years shall have the programs 14 included as part of the formula need calculation pursuant to 15 16 section 79-1007.02 beginning with school fiscal year 2010-11. The 17 purposes of sections 79-1101 to 79-1104 are to provide increased 18 state assistance to selected school districts, cooperatives of 19 school districts, and educational service units for early childhood 20 education, to encourage coordination between public and private 21 service providers of early childhood education and child care 22 programs, and to provide state support for efforts to improve training opportunities for staff in such programs. 23
- 24 (3) For purposes of sections 79-1101 to 79-1104, early 25 childhood education program means any prekindergarten part-day or full-day program with a stated purpose of promoting social, 26 27 emotional, intellectual, language, physical, and aesthetic learning for 28 development and children from birth to

- 1 kindergarten-entrance age and family development and support.
- Sec. 17. Section 79-1103, Reissue Revised Statutes of
- 3 Nebraska, is amended to read:
- 4 79-1103. (1) The State Department of Education shall
- 5 establish and administer the Early Childhood Education Grant
- 6 Program. The department shall request proposals for early
- 7 childhood education programs from local school districts,
- 8 cooperatives of school districts, and educational service units
- 9 working in cooperation with existing nonpublic programs which meet
- 10 the requirements of subsection (2) of section 79-1104. Each
- 11 program selected may be provided a grant of up to one-half of the
- 12 total budget of the program per year. Pilot projects previously
- 13 funded under this section as it existed immediately before
- 14 September 1, 2001, and Even Start family literacy programs which
- 15 exhaust their eligibility for Even Start funds shall be eligible
- 16 for grant awards if their continuation plans meet the requirements
- 17 of subsection (2) of this section. Programs selected for grant
- 18 awards may receive continuation grants subject to the availability
- 19 of funding and the submission of a continuation plan which meets
- 20 the requirements of such subsection.
- 21 (2) Each program proposal which is accepted by the
- 22 department shall include (a) a planning period, (b) an agreement to
- 23 participate in periodic evaluations of the program to be specified
- 24 by the department, (c) evidence that the program will be
- 25 coordinated or contracted with existing programs, including those
- 26 listed in subdivision (d) of this subsection and nonpublic programs
- 27 which meet the requirements of subsection (2) of section 79-1104,
- 28 (d) a plan to coordinate and use a combination of local, state, and

federal funding sources, including, but not limited to, programs 1 2 for children with disabilities below five years of age funded 3 through the Special Education Act, the Early Intervention Act, 4 funds available through the flexible funding provisions under the 5 Special Education Act, the federal Head Start program, 42 U.S.C. 6 et seq., the federal Even Start Family Literacy Program, 20 7 U.S.C. 6361 et seq., Title I of the federal Improving America's 8 Schools Act of 1994, 20 U.S.C. 6301 et seq., and child care 9 assistance through the Department of Health and Human Services, (e) 10 a plan to use sliding fee scales and the funding sources included 11 in subdivision (d) of this subsection to maximize the participation 12 of economically and categorically diverse groups and to ensure that 13 participating children and families have access to comprehensive 14 services, (f) the establishment of an advisory body which includes members, utilization of 15 families and community (g) the 16 appropriately qualified staff, (h) an appropriate child-to-staff 17 ratio, (i) appropriate group size, (j) compliance with minimum health and safety standards, (k) appropriate facility size and 18 19 equipment, (1) a strong family development and support component 20 recognizing the central role of parents in their children's 21 development, (m) developmentally and culturally appropriate 22 curriculum, practices, and assessment, (n) sensitivity to the 23 economic and logistical needs and circumstances of families in the 24 provision of services, (o) integration of children of diverse 25 social and economic characteristics, (p) a sound evaluation 26 component, including at least one objective measure of child 27 performance and progress, (q) continuity with programs in 28 kindergarten and elementary grades, (r) well-defined language

1 development and early literacy emphasis, including the involvement

- 2 of parents in family literacy activities, (s) a plan for ongoing
- 3 professional development of staff, and (t) inclusion of children
- 4 with disabilities as defined in the Special Education Act, all as
- 5 specified by rules and regulations of the department in accordance
- 6 with sound early childhood educational practice.
- 7 (3) The department shall make an effort to fund programs
- 8 widely distributed across the state in both rural and urban areas.
- 9 (4) A report evaluating the programs shall be made to the
- 10 State Board of Education and the Legislature by January 1 of each
- 11 odd-numbered year. Up to five percent of the total appropriation
- 12 for the Early Childhood Education Grant Program may be reserved by
- 13 the department for evaluation and technical assistance for the
- 14 programs.
- 15 (5) Programs selected for funding may be awarded
- 16 continuation funding on the submission of a continuation plan
- 17 demonstrating that the program will continue to meet the
- 18 requirements of subsection (2) of this section.
- 19 (6) The board shall adopt and promulgate rules and
- 20 regulations to implement the Early Childhood Education Grant
- 21 Program.
- 22 (7) Beginning with school year 2005-06, it is the intent
- 23 of the Legislature to appropriate an additional fifteen million
- 24 dollars annually to the department in order to expand the
- 25 availability of early childhood education programs to meet the
- 26 needs of at-risk children who are four years of age or older but
- 27 younger than school age.
- Sec. 18. Section 79-1142, Reissue Revised Statutes of

- 1 Nebraska, is amended to read:
- 2 79-1142. (1) Level I services refers to services
- 3 provided to children with disabilities who require an aggregate of
- 4 not more than three hours per week of special education services
- 5 and support services and includes all administrative, diagnostic,
- 6 consultative, and vocational-adjustment counselor services.
- 7 Support services means preventive services for children from birth
- 8 to age twenty-one years and, if the child's twenty-first birthday
- 9 occurs during the school year, until the end of that school year,
- 10 not identified or verified as having a disability pursuant to
- 11 sections 79-1118.01 and 79-1138 but who demonstrate a need for
- 12 specially designed assistance in order to benefit from the school's
- 13 general education curriculum. The total allowable reimbursable
- 14 cost for support services shall not exceed a percentage,
- 15 established by the State Board of Education, of the school
- 16 district's or approved cooperative's total allowable reimbursable
- 17 cost for all special education programs and support services. The
- 18 percentage established by the State Board of Education for support
- 19 services shall not exceed ten percent.
- 20 (2) For special education and support services provided
- 21 in each school fiscal year, the State Department of Education shall
- 22 reimburse each school district in the following school fiscal year
- 23 a pro rata amount determined by the department from appropriations
- 24 for special education approved by the Legislature and based on
- 25 allowable excess costs for all special education programs and
- 26 support services.
- 27 (3)(a) The High Cost Fund is created for the purpose of
- 28 assisting school districts in addressing the needs of high-need

1 school-age students with disabilities. The fund shall consist of a 2 portion of the money, as determined by the department, appropriated 3 for special education by the Legislature. A school district may 4 apply to be reimbursed from the High Cost Fund, at a pro rata 5 amount determined by the department, in the year the cost is 6 incurred, for the cost of providing special education and related 7 services to high-need school-age students with disabilities. Any 8 money in the High Cost Fund not expended in each fiscal year shall 9 be allocated to school districts through the special education reimbursement process pursuant to subsection (2) of this section. 10 11 Each fiscal year the department shall establish a schedule for reimbursements from the fund to eligible school districts. 12 Any 13 costs reimbursed from the fund in the year incurred shall not be 14 eligible for reimbursement the following year. Any money in the 15 fund available for investment shall be invested by the state

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(b) A school district shall submit an application on forms prescribed by the department for reimbursement from the High Cost Fund which (i) addresses the financial impact a student with a disability has on the budget of the school district, (ii) ensures that the cost of the high-need school-age student with a disability is greater than three times the average per pupil expenditure in the state, and (iii) meets the eligibility criteria established by the department for reimbursement from the fund, including, but not limited to, the number and percentage of high-need school-age

investment officer pursuant to the Nebraska Capital Expansion Act

and the Nebraska State Funds Investment Act.

(4) Cooperatives of school districts or educational

students with disabilities served by the school district.

1 service units shall also be eligible for reimbursement for

- 2 cooperative programs pursuant to this section if such cooperatives
- 3 or educational service units have complied with the reporting and
- 4 approval requirements of section 79-1155 for cooperative programs
- 5 which were offered the preceding year. The payments shall be made
- 6 by the department to the school district of residence, cooperative
- 7 of school districts, or educational service unit each year in a
- 8 minimum of seven payments between the fifth and twentieth day of
- 9 each month beginning in December. Additional payments may be made
- 10 based upon additional valid claims submitted. The State Treasurer
- 11 shall, between the fifth and twentieth day of each month, notify
- 12 the Director of Administrative Services of the amount of funds
- 13 available in the General Fund for payment purposes. The director
- 14 shall, upon receiving such certification, draw warrants against
- 15 funds appropriated.
- 16 (5) The department shall contract annually with one or
- 17 more school districts or educational service units or with a public
- 18 institution of city, county, or state government to provide
- 19 regional and statewide educational and support services for
- 20 students who are deaf or hard of hearing.
- 21 Sec. 19. Section 79-1144, Reissue Revised Statutes of
- 22 Nebraska, is amended to read:
- 23 79-1144. Funds shall be appropriated by the Legislature
- 24 to carry out sections 79-1142 to 79-1144 and 79-1147, and funds
- 25 previously included in programs 401 and 402 of the budget of the
- 26 State Department of Education shall be added to funds appropriated
- 27 pursuant to this section in an amount not less than the amount
- 28 appropriated to the department pursuant to this section for

FY2003-04. The department is authorized to expend a portion of 1 2 such funds for contracting pursuant to subsection (5) of section 3 79-1142 and pursuant to section 79-11,109. Such funds shall be 4 channeled through the State Department of Education. The 5 department is authorized to expend such funds upon proper vouchers 6 approved by the department and warrants issued by the Director of 7 Administrative Services for financial reimbursement to school 8 districts, educational service units, special education 9 cooperatives created by school districts, agencies, and parents or guardians, including (1) reimbursement pursuant to section 79-1129 10 11 for actual transportation expenses per year for children with 12 disabilities a pro rata amount which shall be determined by the 13 State Board of Education from appropriations for special education the Legislature based on all actual allowable 14 approved by 15 transportation costs, (2) reimbursement for instructional aids and 16 consultative, supervisory, research, and testing services to school 17 districts, and (3) reimbursement for salaries, wages, maintenance, supplies, travel, and other expenses essential to carrying out the 18 19 special education programs. provisions for Minor building 20 modifications shall not be eligible for state reimbursement as an 21 allowable expense. Applications for state reimbursement for actual 22 transportation expenses shall be submitted to the department 23 annually on a date and on forms prescribed by the department. 24 Amendments to applications for actual transportation expenses shall 25 be submitted on dates prescribed by the department during the 26 school year in which the original application was made.

- 27 Sec. 20. Section 79-1310, Reissue Revised Statutes of
- Nebraska, is amended to read:

79-1310. (1) The School Technology Fund is created. The 1 2 fund shall consist of the money transferred to the fund pursuant to 3 section 81-1634, appropriations made by the Legislature pursuant to 4 subsection (3) of this section beginning in FY2005-06, and 5 appropriations made by the Legislature. which are received as 6 gifts or grants. For award applications received on or before July 7 31, 2002, the The State Board of Education shall authorize disbursement of the fund for reimbursement requests for projects 8 9 started on or after July 1, 2005, as provided in this section. Any money in the School Technology Fund available for investment shall 10 11 be invested by the state investment officer pursuant to the 12 Nebraska Capital Expansion Act and the Nebraska State Funds 13 Investment Act. completed on or before July 31, 2002, if the 14 request is received (1) on or before the tenth day following May 15 29, 2003, or (2) on or before the ninetieth day following receipt 16 of the award application by the State Department of Education. The 17 board shall not authorize any other disbursement of the fund. Such 18 disbursement shall be made as funds become available, and the 19 requirement that the State Board of Education authorize such 20 disbursement shall constitute an obligation of the fund. The first priority for the disbursement of the School 21 Technology Fund is the direct connection of each kindergarten 22 23 through grade twelve public school district, affiliated school 24 system, or Class VI school system to a statewide public computer 25 information network. Subsequent priorities for disbursement may 26 include, but are not limited to, development of networking

installation of equipment, or other telecomputing needs

a district or system, the purchase or

as

capabilities within

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1 determined by the State Board of Education. Funds shall be awarded

2 on the basis of need, ability to pay, and the number of buildings

3 in each district or system designated by the State Board of

4 Education as suitable for direct connection to a statewide public

5 computer information network.

6 (2) The Legislature finds that the Nebraska Information 7 Technology Commission has identified three strategic technology initiatives that will increase the potential for providing an 8 9 essential education to all students in school districts in this state. The State Board of Education may authorize disbursement of 10 the fund to (a) develop a broadband, scalable telecommunications 11 infrastructure for use in distance learning classrooms, (b) develop 12 13 an Internet protocol-based network to connect all existing and 14 future distance learning and videoconferencing facilities, (c) 15 upgrade telecommunications equipment, and (d) provide training and 16 support programs for educators in the development and use of 17 distance learning. Funds shall be awarded on the basis of need as 18 designated by the board. The State Board of Education shall may 19 adopt and promulgate rules and regulations to carry out the 20 provisions of this section. The State Board of Education shall consult with the Nebraska Information Technology Commission in 21 carrying out this section. Any money in the School Technology Fund 22 23 available for investment shall be invested by the state investment 24 officer pursuant to the Nebraska Capital Expansion Act and the Nebraska State Funds Investment Act. Within thirty days after all 25 26 obligations of the School Technology Fund have been disbursed, the 27 Commissioner of Education shall so certify to the State Treasurer 28 and the State Treasurer shall thereupon transfer any remaining

1 balance to the General Fund. The School Technology Fund shall

- 2 terminate upon such transfer.
- 3 (3) It is the intent of the Legislature to appropriate
- 4 ten million dollars annually to the School Technology Fund
- 5 beginning in FY2005-06.
- 6 Sec. 21. Original sections 79-728, 79-761, 79-809,
- 7 79-810, 79-8,136, 79-1101, 79-1103, 79-1142, 79-1144, and 79-1310,
- 8 Reissue Revised Statutes of Nebraska, and section 9-812, Revised
- 9 Statutes Supplement, 2004, are repealed.
- 10 Sec. 22. The following section is outright repealed:
- 11 Section 79-1328, Reissue Revised Statutes of Nebraska.

LEGISLATURE OF NEBRASKA

NINETY-NINTH LEGISLATURE

FIRST SESSION

LEGISLATIVE BILL 689

Introduced by Stuhr, 24; Raikes, 25

Read first time January 19, 2005

Committee: Education

A BILL

- FOR AN ACT relating to schools; to create and provide duties for
 the Distance Education Enhancement Task Force; to provide
 for termination; to state intent relating to
 appropriations; and to declare an emergency.
- 5 Be it enacted by the people of the State of Nebraska,

1 Section 1. The Distance Education Enhancement Task Force

- 2 is created. Members of the task force shall be appointed on or
- 3 before June 15, 2005, and shall include:
- 4 (1) The chairperson and one other member of the Education
- 5 Committee of the Legislature;
- 6 (2) The chairperson of the Transportation and
- 7 Telecommunications Committee of the Legislature;
- 8 (3) The chairperson of the Appropriations Committee of
- 9 the Legislature;
- 10 (4) Two representatives of educational service units;
- 11 (5) Two representatives of distance education consortia;
- 12 (6) Two representatives of the State Department of
- 13 Education, one of whom shall have expertise in technology
- 14 infrastructure;
- 15 (7) Two representatives of the Public Service Commission;
- 16 (8) Two representatives of the Nebraska Information
- 17 Technology Commission;
- 18 (9) Two representatives of postsecondary education; and
- 19 (10) One representative of the Governor.
- The members listed in subdivisions (1), (4), (5), (7),
- 21 and (9) of this section shall be appointed by the Executive Board
- 22 of the Legislative Council. The members listed in subdivisions
- 23 (6), (8), and (10) of this section shall be appointed by the
- 24 Governor.
- 25 The chairperson of the Education Committee of the
- 26 Legislature shall be the chairperson of the task force and shall
- 27 call the initial and subsequent meetings of the task force.
- 28 Members of the task force shall be reimbursed for their actual and

1 necessary expenses incurred in carrying out their duties as members

- 2 of the task force as provided in sections 81-1174 to 81-1177. The
- 3 Education Committee of the Legislature, the Transportation and
- 4 Telecommunications Committee of the Legislature, the Legislative
- 5 Fiscal Analyst, the State Department of Education, and the Nebraska
- 6 Information Technology Commission shall provide research and
- 7 administrative support for the task force. For budgetary purposes
- 8 only, the task force shall be within the Legislative Council.
- 9 The task force shall terminate on December 31, 2005.
- 10 Sec. 2. The Distance Education Enhancement Task Force
- 11 shall develop an improvement plan to upgrade and coordinate
- 12 distance education in Nebraska. The task force shall make
- 13 recommendations for policies and potential legislation to the Clerk
- 14 of the Legislature, the Education Committee of the Legislature, the
- 15 Transportation and Telecommunications Committee of the Legislature,
- 16 and the Appropriations Committee of the Legislature on or before
- 17 November 1, 2005. The plan shall include, but not be limited to:
- 18 (1) The development of a broadband, scalable
- 19 telecommunications infrastructure for use in distance learning
- 20 classrooms:
- 21 (2) The development of an Internet protocol-based network
- 22 to interconnect all existing and future distance education and
- 23 videoconferencing facilities;
- 24 (3) Upgrades of current telecommunications equipment;
- 25 (4) Training and support programs for educators in the
- 26 development and use of distance learning;
- 27 (5) The transfer of distance education coordination
- 28 responsibilities from distance education consortia to educational

- 1 service units on or before July 1, 2007;
- 2 (6) Statewide coordination for distance education
- 3 offerings;
- 4 (7) Potential funding sources;
- 5 (8) The establishment of an equitable and affordable
- 6 financing system for both equipment and usage;
- 7 (9) The establishment of a system that allows school
- 8 districts to purchase quality distance education offerings from
- 9 other school districts either directly or with educational service
- 10 units acting as fiscal agents; and
- 11 (10) Statewide provision of other technology-based
- 12 services.
- 13 The task force may hold one or more public hearings to
- 14 obtain public input.
- 15 Sec. 3. It is the intent of the Legislature to
- 16 appropriate ten million dollars to the State Department of
- 17 Education each fiscal year for FY2006-07, FY2007-08, and FY2008-09
- 18 to implement the recommendations of the Distance Education
- 19 Enhancement Task Force.
- 20 Sec. 4. Since an emergency exists, this act takes effect
- 21 when passed and approved according to law.

LB 689A LB 689A

LEGISLATURE OF NEBRASKA

NINETY-NINTH LEGISLATURE

FIRST SESSION

LEGISLATIVE BILL 689A

Introduced by Stuhr, 24
Read first time February 28, 2005
Placed on General File

A BILL

- FOR AN ACT relating to appropriations; to appropriate funds to aid
 in carrying out the provisions of Legislative Bill 689,

 Ninety-ninth Legislature, First Session, 2005; and to
 declare an emergency.
- 5 Be it enacted by the people of the State of Nebraska,

LB 689A

1 Section 1. There is hereby appropriated \$10,000 from the

- 2 General Fund for FY2005-06 to the Legislative Council, for Program
- 3 122, to aid in carrying out the provisions of Legislative Bill 689,
- 4 Ninety-ninth Legislature, First Session, 2005.
- 5 No expenditures for permanent and temporary salaries and
- 6 per diems for state employees shall be made from funds appropriated
- 7 in this section.
- 8 Sec. 2. There is hereby appropriated \$10,000,000 from
- 9 the General Fund for FY2006-07 to the State Department of
- 10 Education, for Program 25, to aid in carrying out the provisions of
- 11 Legislative Bill 689, Ninety-ninth Legislature, First Session,
- 12 2005.
- 13 Sec. 3. Since an emergency exists, this act takes effect
- 14 when passed and approved according to law.

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LB689 LB 689
LEGISLATURE OF NEBRASKA
NINETY-NINTH LEGISLATURE
FIRSTSESSION
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LEGISLATIVE BILL 689 (with AM0403 modifications) Introduced by Stuhr, 24; Raikes, 25 Read first time January 19, 2005 Committee: Education ABTIJ 1 FOR AN ACT relating to schools; to create and provide duties for 2 the Distance Education Enhancement Task Force; to provide 3 for termination; to state intent relating to 4 appropriations; and to declare an emergency. 5 Be it enacted by the people of the State of Nebraska, -1-LB689 LB 689 1 Section 1. The Distance Education Enhancement Task Force 2 is created. Members of the task force shall be appointed on or 3 before June 15, 2005, and shall include: 4 (1) The chairperson and one other member of the Education 5 Committee of the Legislature; 6 (2) The chairperson of the Transportation and 7 Telecommunications Committee of the Legislature; 8 (3) The chairperson of the Appropriations Committee of 9 the Legislature; 10 (4) Two representatives of educational service units; 11 (5) Two representatives of distance education consortia; 12 (6) One school district superintendent or public school principal; (7) Two One representatives of the State Department of 13 Education, one of whomwho shall have expertise in technology 14 infrastructure; 15 (78) Two One representatives of the Public Service Commission; 16 $(\frac{89}{2})$ Two One representatives of the Nebraska Information 17 Technology Commission; 18 (9) Two representatives of postsecondary education; and 19 (10) One representative of the Governor; (11) One representative of the Nebraska Educational Telecommunications Commission who has expertise in technology infrastructure or distance education; (12) One representative of the University of Nebraska who has expertise in technology infrastructure or distance education; (13) One representative of state colleges who has expertise in technology infrastructure or distance education; (14) One representative of community colleges who has expertise in technology infrastructure or distance education; (15) One representative of the Coordinating Commission for Postsecondary Education who has expertise in dual enrollment courses. 20 The members listed in subdivisions (1), (4), (5), $(\frac{78}{})$, 21 and $\frac{(9)}{(11)}$ (11) through (15) of this section shall be appointed by the Executive Board 22 of the Legislative Council. The members listed in subdivisions 23 $(\red{67})$, $(\red{89})$, and (10) of this section shall be appointed by the 24 Governor. 25 The chairperson of the Education Committee of the 26 Legislature shall be the chairperson of the task force and shall

27 call the initial and subsequent meetings of the task force.

-2-

28 Members of the task force shall be reimbursed for their actual and

LB689 LB 689 1 necessary expenses incurred in carrying out their duties as members 2 of the task force as provided in sections 81-1174 to 81-1177. The 3 Education Committee of the Legislature, the Transportation and 4 Telecommunications Committee of the Legislature, the Legislative 5 Fiscal Analyst, the State Department of Education, and the Nebraska 6 Information Technology Commission shall provide research and 7 administrative support for the task force. For budgetary purposes 8 only, the task force shall be within the Legislative Council. 9 The task force shall terminate on December 31, 2005. 10 Sec. 2. The Distance Education Enhancement Task Force 11 shall develop an improvement plan to upgrade and coordinate 12 distance education in Nebraska. The task force shall make 13 recommendations for policies and potential legislation to the Clerk 14 of the Legislature, the Education Committee of the Legislature, the 15 Transportation and Telecommunications Committee of the Legislature, 16 and the Appropriations Committee of the Legislature on or before 17 November 1 December 31, 2005. The plan shall include, but not be limited to: 18 (1) The development of a broadbandhigh capacity, scalable 19 telecommunications infrastructure for use in distance learning 20 classrooms; 21 (2) The development of an Internet protocol-based network 22 to interconnect all existing and future distance education and 23 videoconferencing facilities; 24 (3) Upgrades of current telecommunications equipment; 25 (4) Training and support programs for educators in the 26 development and use of distance learning; 27 (5) The transfer of distance education coordination 28 responsibilities from distance education consortia to educational -3-LB689 LB 689 1 service units on or before July 1, 2007; 2 (6) Statewide coordination for distance education 3 offerings; 4 (7) Potential funding sources; 5 (8) The establishment of an equitable and affordable 6 financing system for both equipment and usage; 7 (9) The establishment of a system that allows school 8 districts to purchase quality distance education offerings from 9 other school districts either directly or with educational service 10 units acting as fiscal agents; and 11 (10) Statewide provision of other technology-based 12 services. 13 The task force may hold one or more public hearings to 14 obtain public input. 15 Sec. 3. It is the intent of the Legislature to 16 appropriate ten million dollars to the State Department of 17 Education each fiscal year for FY2006-07, FY2007-08, and FY2008-09 18 to implement the recommendations of the Distance Education 19 Enhancement Task Force. 20 Sec. 4. Since an emergency exists, this act takes effect 21 when passed and approved according to law.

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Distance Education Enhancement Task Force Membership and research/administrative support (with LB689AM0403 modifications) WORKSHEET

Members of the task force shall be appointed on or before June 15, 2005, and shall include:

- (1A) The chairperson of the Education Committee of the Legislature; Senator Ron Raikes of Lincoln
- (2) The chairperson of the Transportation and Telecommunications Committee of the Legislature;

Senator Tom Baker of Trenton

(3) The chairperson of the Appropriations Committee of the Legislature; **Senator Don Pederson of North Platte**

*** Appointed by the Executive Board of the Legislative Council; Sen. Pat Engel, Chairperson, and Sen. Jim Cudaback, Vice Chairperson***

(1B)One other member of the Education Committee; Either Senator Bourne of Omaha, Senator Byars of Beatrice, Senator Howard of Omaha, Senator Kopplin of Gretna, Senator McDonald of St. Paul, Senator Schrock of Elm Creek, or Senator Stuhr of Bradshaw;

- (4) Two representatives of educational service units;
- (5) Two representatives of distance education consortia;
- (6) One school district superintendent or public school principal;
- (8) One representative of the Public Service Commission;
- (11) One representative of the Nebraska Educational Telecommunications Commission who has expertise in technology infrastructure or distance education;
- (12) One representative of the University of Nebraska who has expertise in technology infrastructure or distance education;
- (13) One representative of state colleges who has expertise in technology infrastructure or distance education;
- (14) One representative of community colleges who has expertise in technology infrastructure or distance education:
- (15) One representative of the Coordinating Commission for Postsecondary Education who has expertise in dual enrollment courses.

Appointed by the Governor

- (7) One representative of the State Department of Education who shall have expertise in technology infrastructure;
- (9) One representative of the Nebraska Information Technology Commission;
- (10) One representative of the Governor;

The members listed in subdivisions (1), (4), (5), (8), and (11) through (15) of this section shall be appointed by the Executive Board of the Legislative Council. The members listed in subdivisions (7), (9), and (10) of this section shall be appointed by the Governor.

The Education Committee of the Legislature, the Transportation and Telecommunications Committee of the Legislature, the Legislature Fiscal Analyst, the **State Department of Education**, and the **Nebraska Information Technology Commission** shall provide research and administrative support for the task force.

DRAFT

Converting distance learning networks to a high bandwidth, flexible infrastructure

A White Paper by the Staff of the Nebraska Information Technology Commission and the Collaborative Aggregation Partnership (CAP)

> December 10, 2004 (Revised March 7, 2005)

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Introduction

The staff of the Nebraska Information Technology Commission and the members of the Collaborative Aggregation Partnership (CAP) have drafted this white paper in an attempt to communicate the history, challenges and future facing a majority of Nebraska's distance learning consortia as they approach the end of their distance learning contracts. This white paper will suggest an upgrade plan and sustainable networking topology that will rely upon cooperation among K-12 districts, ESUs, higher education partners, and selected agencies of the State of Nebraska. The goal of this project is to upgrade existing video and data circuits and connect them into a high bandwidth, wide area network that will allow for a variety of asynchronous and synchronous distance learning applications and other education-related services to be delivered to the state's public high schools and their ESU, informal education and higher education partners. Although this white paper primarily focuses on the interoperability needs of the high schools and colleges using JPEG and MPEG2 video compression technology, the statewide education network would eventually serve every school building, district, and college.

Key assumptions include:

- That upgrading all 180 JPEG sites to H.264 video within a finite length of time (July 2006-August 2008), regardless of their original contract termination date, would be advantageous;
- That the capital investment for H.264 codecs and school/aggregation routing equipment comes from state, federal, or foundation funding sources and that the recurring revenue amount is roughly equivalent to the amount prior to conversion;
- That converting a commercial video data service (JPEG + T-1 data) to a high bandwidth (45Mbps or greater), flexible use network where the school or regional aggregation center would be responsible for their choice of applications and apportioned bandwidth would be advantageous;
- That maintaining the monthly recurring costs for the schools' flexible use, high bandwidth (45Mbps or greater) network services at a cost similar to the current statewide average (\$1325/month--video + \$216/month--T1 data = \$1541/month) would be advantageous;
- That proliferating the IP videoconferencing applications to elementary schools and middle schools, and the ability to interconnect schools with higher education, health care, Internet2 entities outside Nebraska, and other state agencies would be advantageous;
- That preserving the existing programmatic relationships between schools already using video distance learning and to convert the infrastructure to a flexibly provisioned data network capable of serving emerging technology applications would be beneficial;
- That using Network Nebraska, the statewide multi-purpose telecommunications backbone, to the fullest extent possible; delivering Internet1, Internet2, streaming video, IP videoconferencing, and secure data transfer to participating entities and/or groups of participating entities would be beneficial;
- That the level and amount of involvement and intervention by selected state agencies and Network Nebraska to reach the solution described will largely be determined by the local

school districts, educational service units, distance learning consortia, and Legislature, upon mutual agreement by the affected state agencies.

BACKGROUND

Beginning in 1992, groups of Nebraska school districts began organizing themselves into eleven consortia for the purpose of delivering distance learning classes using interactive videoconferencing, mainly to high school classrooms. With the addition of one new consortium in 2002, 12 regional distance education consortia in Nebraska now provide video and data services to approximately 270 school districts. The number of school districts within each consortium ranges in number from six (6) to 72. The consortia combined local funds with state and federal grant funds to establish video distance learning, with an obligation to pay recurring costs over the life of 10-year contracts with telecommunications providers. The consortia are independent entities organized under inter-local agreements by participating school districts. Each has its own board of directors and distance learning director, acting as an executive officer. The distance learning directors' salaries are paid all, or in part, by the participating school districts or co-located Educational Service Unit.

The initial investment to build the distance education networks included about \$17.5 million of state lottery funds and federal funding. The Legislature, as recently as 2001, appropriated an additional \$3 million of state lottery funds to complete the system by adding another 44 school districts. Together, the 12 regional consortia spend over \$3 million per year for video service contracts with providers. These costs average approximately \$1325 per school district per month for the video service, ranging from \$900 per month to \$1800 per month.

Beginning with the fall semester of 2006 the original video service contracts for the distance learning consortia will start to expire. By August 2006, the contracts of the Southwest Nebraska Distance Learning Consortium and the Niobrara Valley TelePartnership will end, affecting 55 sites. Another seven distance learning consortia service contracts will expire through 2010, affecting 125 more sites. The 21 districts served with MPEG2 technology in the Crossroads Distance Education Consortium and Sandhills Technology Education Partnership already have ATM (asynchronous transfer mode) technology. An early technical assessment is that each of these 21 schools will need one codec card to upgrade their systems to compatibility with H.263/H.264 video technology. The 111 K-12 sites that have H.263/H.264 video over 100 Mbps cable-provided circuits are already upgraded. [See Appendix #3]

Currently, the 12 consortia utilize three different video technologies and are not able to provide interconnectivity between consortia. Nine telephone company-provided, JPEG consortia comprise 152 high schools and 28 ESU, higher education and informal education partners. All of these contracts for 45 Mbps (DS-3) circuits are due to expire between 2006 and 2010, with no replacement or upgrade funding models in place. Two telephone company-provided, MPEG2 consortia comprise 21 sites using 45 Mbps ATM infrastructure with contracts not due to expire until 2012. Each of these 21 sites will presumably need an H.264 codec card inserted into their video compression device to assure their interoperability with the other distance learning high schools. A cable company-provided consortium of 67 school districts in southeast Nebraska, 21

other cable-based schools near Kearney, and eight Lincoln Public Schools sites have already upgraded to H.263/H.264 video technology using 100Mbps or 1000Mbps full duplex circuits. Also, almost every school district with JPEG or MPEG2 video service and educational service units are purchasing from 1.5Mbps to 3.0Mbps of Internet access over these same circuits for an additional monthly charge.

The distance learning consortia offer a total of more than 600 classes per year, providing over 6,000 students and 2,300 adult learners with coursework including such subjects as foreign language, social sciences, mathematics, language arts, agriculture, and natural science. For rural Nebraska, especially, video distance learning is a key strategy for offsetting teacher shortages in certain subjects, offering advanced classes, and even providing elements of the core curriculum in order to maintain accreditation. The current distance learning systems concentrate on offering high school and college credit classes mainly to high school juniors and seniors, affecting nearly 10% of the students of this age group across the state, who opt to take video distance learning classes.

Distance learning holds even greater potential in the future with an integrated statewide system. A statewide synchronous video system would expand the opportunities for sharing classes among more schools across the State and allow much greater access to the instructional resources from higher education institutions. A statewide synchronous video system that is integrated with digital media and high bandwidth access to Internet1 and Internet2 would open up a wealth of educational resources across the state and from the nation and world. The flexible bandwidth of the resulting network would allow teachers to download digital video clips to supplement daily lessons, access streaming video, and conduct interactive videoconferencing with experts and scientists from across the globe with minimal prior planning. The teachers would also be able to participate in virtual field trips to distant sites (e.g. Smithsonian Institution, Mt. St. Helen's), gain access to web-based eLearning resources, and conduct videoconferences between groups of students from all over the United States. [See Appendix #1]

SWOC ANALYSIS

Strengths of the Existing Distance Learning Consortia Arrangement

The strengths most often associated with the existing distance learning consortia are:

- Fiber optic cable was installed from telecommunications service providers into a majority of the State's K-12 school districts;
- Commercial video/data service contracts and interlocal agreements were pioneered;
- Local funds, combined with state and federal grants, were procured to purchase and install distance learning equipment and infrastructure;
- High-quality video distance education has been delivered to schools on a reliable basis;
- Cooperation and interdependence are highly developed among participating school districts;
- Quality teaching resources have been shared with schools that would not otherwise be able to hire highly qualified teachers.

Weaknesses of the Existing Distance Learning Consortia Arrangement

The weaknesses most often associated with the existing distance learning consortia are:

- Course exchange is localized rather than regionalized or statewide, and prospective higher ed partners have some difficulty reaching schools within their service areas;
- The bartering or trading of classes between schools fails to incentivize larger, self-sufficient, or more progressive districts to offer synchronous or asynchronous learning opportunities;
- Most bell schedules and school calendars of schools involved in synchronous video instruction remain unsynchronized, thereby sacrificing precious instructional minutes;
- Several consortia boundaries and sizes do not correspond with any other political subdivision
 or management structure and fail to take advantage of economies of scale available through
 regionalization;
- In most consortia, existing technology fails to take full advantage of the bandwidth available to schools:
- Most consortia did not create a locally sustainable funding plan for upgrade and replacement at the outset of their original contract relationships.

Opportunities facing the Existing Distance Learning Consortia Arrangement

The opportunities most often associated with the future distance learning relationships are:

- The ability to develop regional education cooperatives that enable learners to accomplish seamless transfer between high school and college, and empowering administrators to procure all the educational opportunities needed within the cooperative;
- The ability to connect additional schools or groups of schools to Network Nebraska for intrastate and interstate connectivity as well as cost savings from lower priced Internet and access to Internet2;
- The ability to provide a common central scheduling or asset management software to streamline the process for reserving and activating video classrooms;
- The ability to enter into contracts that would provide flexible use of the existing bandwidth, capable of supporting multiple data services (including videoconferencing, streaming video, Internet1, Internet2 and other types of digital traffic) at the discretion of end users;
- The ability to regionalize future resource allocation, technical support, network management, and load balancing of Internet bandwidth [See Appendix #2];
- The ability to maximize the use of eLearning management software and digital media resources to augment synchronous video instruction.

Challenges facing the Existing Distance Learning Consortia Arrangement

The challenges most often associated with the present distance learning consortia are:

- Current JPEG technology in nine consortia serving 180 K-12 and higher education sites operates at a very high bandwidth, is obsolete and inefficient, and will likely suffer increased down time due to equipment failure before existing contracts expire;
- Providers have indicated that there may be major price increases when the existing 10-year video service contracts expire in the nine consortia using JPEG technology;
- Current network topology limits schools using JPEG or MPEG2 technology to just one class at a time, with only a very small capacity available for Internet1 and Internet2;

- Upgrading to new technology that makes more efficient use of network bandwidth involves considerable capital investment;
- Incompatible video technologies and the lack of interconnections among distance learning consortia limit the sharing of classes to those schools within each regional consortium;
- Spreading IP videoconferencing technology to more elementary and middle schools and allowing it to proliferate within high schools will involve building LAN upgrades as well as campus infrastructure upgrades.

STATEWIDE SYNCHRONOUS VIDEO NETWORK

Current Status

The NITC has been working on the concept of a statewide synchronous video network since 1999. In fact, part of the Legislature's concern that led to formation of the NITC was the choice of incompatible technologies in some of the distance learning consortia. Originally, this was a problem of analog vs. digital technologies. Now it is a problem of incompatible JPEG, MPEG2, and H.263/H.264 video protocols. Through the efforts of the NITC and its work groups, the following steps have been taken to move Nebraska closer to the vision of a statewide system:

- NITC Video Compression Standards, February 2002 (moved Nebraska from four video standards to two);
- NITC Video Compression Standards, September 2004 (moved Nebraska from two video standards to one);
- The Statewide Synchronous Video Work Group, composed of K-12, higher education, state agencies, telehealth, and informal education, has met five times to further the goal of interoperability through implementation of the NITC video standards and discussion of related upgrade issues;
- NITC Synchronous Video Network Strategic Initiative / Strategic Plan;
- Special request to Congressman Osborne to obtain \$9.8 million for upgrade of the synchronous video network;
- NITC prioritization of the NDE Distance Learning: Infrastructure, Programming and Training Budget Request as one of five key I.T. projects to the Governor and Legislature;
- Facilitating the November 5, 2004 meeting with distance learning consortia directors and telecommunications vendors to discuss networking options;
- Development of this white paper to help describe the technology, implementation, and management of a high bandwidth, wide area network that will allow for a variety of asynchronous and synchronous distance learning applications and services to be delivered to numerous education entities; and
- Numerous meetings and briefings with involved entities to describe the elements of the project.

Currently (2-23-05), LB 689, sponsored by Senator Stuhr, with Education Committee Amendment 403 is on General File and due to be discussed on the floor of the Legislature. This bill:

• Creates the Distance Education Enhancement Task Force and names membership by 6/15/05:

- Chair of the Education Committee (chair of the Task Force)
- Chair of the Transportation and Telecommunications Committee
- Chair of the Appropriations Committee
- Two representatives from Educational Service Units
- Two representatives from distance education consortia
- One principal or superintendent
- One representative from the Nebraska Department of Education (infrastructure)
- One representative from the Nebraska Public Service Commission
- One representative from the Nebraska Information Technology Commission
- One representative from the Nebraska Educational Telecommunications Commission
- One representative from the coordinating commission for postsecondary education
- One representative from state colleges
- One representative from community colleges
- One representative from the University of Nebraska
- One representative of the Governor
- Requires a report by the Task Force by December 31, 2005 to include recommendations to:
 - develop broadband, scalable telecommunications structure for use in distance learning classrooms
 - develop an IP-based network to connect all existing and future distance learning and videoconferencing facilities
 - upgrade telecommunications equipment
 - provide training and support programs for educators in the development and use of distance learning
 - transfer distance education coordination responsibilities from distance education consortia to ESUs
 - provide for statewide coordination for distance education offerings
 - identify potential funding sources
 - establish an equitable and affordable financing system for equipment and usage
 - establishes a system that allows districts to purchase distance education offerings
 - establish statewide provision of other technology-based services
- Includes an intent to fund \$10 million in FY 06, FY 07, FY 08

Future Options

Three options are being considered.

1) Each consortium determines its own upgrade path with no State assistance. The distance learning consortia are independent entities that can renegotiate their own rates, terms and conditions. If they comply with the NITC video standards, they would be able to establish connections to Network Nebraska or other consortia in the future in order to exchange classes or other content. The downside to this option is the risk that without aggregated or volume bidding, the overall costs may be greater than through a collective bargaining process that aggregates contracts. Another risk is that consortia will respond to higher rates by reducing the amount of bandwidth, which restricts the future potential uses of their networks. Individual school districts may respond to higher rates by reducing total bandwidth to the

next most affordable threshold (two or three T-1 data circuits; 3-4.5 Mbps). Full tariff networking costs, including technology upgrade for synchronous video, for the affected sites in the nine JPEG consortia have been estimated by providers to be \$46 million over seven years of a new contract, as compared to \$30 million over 10 years of the existing contracts. Existing sources of funding, such as federal e-rate monies and an average payment of \$1541 per month from each high school, would cover some but not all of the \$46 million, leaving an estimated \$33 million in upfront costs for equipment and networking. Individual consortia would be free to apply for competitive USDA-RUS grants to help assist with each upgrade although each grant has a limit of \$500,000. Without any decrease in projected costs through negotiated bids or any financial support from outside sources, the estimated monthly recurring costs (before E-Rate) on the \$55 million project for each site would be \$4,020/month for 84 months. [See Network Funding Scenario #1]

- 2) Establish a statewide contract with no State funding assistance. Consortia have discussed having Network Nebraska (Collaborative Aggregation Partnership) act as a prime contractor to assist them in negotiating a replacement topology and achieving better cost-savings on service contracts. This would presumably help to attain lower project costs and achieve an integrated, statewide system within a much shorter time frame. It could lead to additional connections to Network Nebraska and further aggregation of Internet purchasing. Yet, without outside funding such as a Congressional appropriation or additional lottery funds, neither the upfront nor the recurring costs would be affordable for many districts. This would further delay the infrastructure necessary to deliver the program elements of an essential Nebraska education. Besides non-participating schools, other excluded features would include scheduling software and transport costs to participate in Network Nebraska. Negotiation of a statewide contract would likely reduce the estimated network and synchronous video upgrade costs (over Option 1) to the affected schools but still could result in a recurring cost that is unaffordable to many schools. [See Network Funding Scenario #2]
- 3) Establish a statewide contract with additional funding for a statewide system. A central contract would lower costs through increased competition and access to technical expertise during contract negotiations. A central contract would provide a technical design that supports a statewide system and enables the service contracts of schools to be co-terminus for future funding upgrades and renegotiation purposes. Additional funding would help to keep overall costs affordable for all districts, create more flexibility for their existing bandwidth, and insure their participation in Network Nebraska. The estimated cost of this option is:
 - \$9.3 million one-time costs to replace video codecs, add switches and routers to the school sites, and additional aggregation routers in each region;
 - An undetermined amount of upfront "buydown" costs that enable the 84-month, recurring costs to be affordable to participating schools;
 - Approximately \$1.5 million per year ongoing costs to offset the Internet transport and backbone costs so that each school will have equitable access to Internet resources;
 - Approximately \$2 million one-time costs to assist with critical local area network (LAN) upgrades for schools, on an as-needed basis;
 - Approximately \$1.5 million to obtain a statewide scheduling/management system for synchronous video distance learning and videoconferencing;
 - Approximately \$200,000 ongoing costs for training and support.

Option 3 contains all the advantages of Option 2 with additional upfront and ongoing support to make the network system affordable to the participating schools. [See Network Funding Scenario #3]

Recommended Approach

The third option of <u>Establishing a statewide contract with additional funding</u> is the only one that will insure a comprehensive, integrated, statewide system with the greatest number of schools involved.

Successful upgrade of the wide area network affecting 180 sites would ensure that technology could continue to play a major role in the delivery of educational services and content for the next seven years and beyond. As schools begin to exhaust the 45 Mbps bandwidth, new networking options could be explored and contracted at that point. Failure to upgrade would almost certainly "sentence" a great number of schools to the absolute minimum of Internet access, without the ability to access the software and data applications needed to deliver the essential elements of a Nebraska education.

RISK ASSESSMENT

The infrastructure upgrades described thus far in this white paper would replace the aging synchronous video technologies destined for contract expiration starting in 2006 and retrofit the present high bandwidth circuits for flexible data usage. The IP video technology upgrades and wide area, high bandwidth networking would greatly increase the number and variety of educational technology applications and Internet access available to schools. The resulting statewide education network would allow for statewide coordination of applications, more secure transport of data, and a more strategic approach to technical support and management. It is evident that some type of additional funding beyond local recurring contributions would be necessary to accomplish the network upgrade. If no funding becomes available, there are a variety of possible scenarios:

- School districts, unable to complete the high bandwidth circuit retrofit, would reduce their connectivity from 45 Mbps (DS-3 circuit) to 1.5 or 3.0 Mbps (one or two T-1 circuits) for the same monthly cost. They could eliminate their synchronous video exchange in favor of an Internet access of 1.5 or 3.0 Mbps (one or two T-1 circuits);
- School districts, unable to complete the high bandwidth circuit retrofit, would reduce their connectivity from 45 Mbps (DS-3 circuit) to 1.5 or 3.0 Mbps (one or two T-1 circuits) for the same monthly cost. Multipoint videoconferencing would decrease to 384 Kbps per channel and Internet access would be restricted to all or part of 1.5 Mbps (one T-1 circuit);
- School districts, either individually or as groups, could opt to increase their monthly recurring costs by 260% and apply for some grants to amortize the high bandwidth circuit retrofit and JPEG technology upgrades over 84 months. This scenario would have school districts or consortia of school districts contracting with telecommunication providers for services on a local basis. This increased monthly cost scenario would likely result in many

school districts either disconnecting or greatly reducing their telecommunications potential. It would also greatly delay the goal of establishing a statewide network that allows for a variety of asynchronous and synchronous distance learning applications and other education-related services to be delivered to the state's public high schools and their ESU, informal education and higher education partners.

NETWORK UPGRADE PLAN

The Network Upgrade Plan includes a proposed timeline of events, a discussion of the roles of the involved entities, and a possible funding portfolio to accomplish the project.

Proposed Timeline of Events

- 1. December 10, 2004: The first draft of the white paper is distributed to affected entities.
- 2. December 10, 2004-February 18, 2005: Input and recommended revisions to this white paper are received from the distance learning consortia, ESU-NOC committee, higher education and informal education partners, and the Statewide Synchronous Video Network Work Group as well as from the consortium boards and member schools.
- 3. February 18-February 25, 2005: The staff of the NITC revise the white paper.
- 4. March 8, 2005: The NITC Technical Panel recommends the white paper as important background information to accomplishing a wide area, high bandwidth, flexibly provisioned network capable of delivering a number of services to Nebraska education entities.
- 5. March 15, 2005: The NITC recommends the white paper as important background material to the Distance Education Enhancement Task Force, if created by LB 689, as the members discuss the creation of a wide area, high bandwidth, flexibly provisioned network capable of delivering a number of services to Nebraska education entities.
- 5. March 15-June 3, 2005: LB 689 is monitored as it moves through the legislative process. Named agencies and organizations respond if asked for membership suggestions for the Distance Education Enhancement Task Force
 - ******* Timeline events 6-8 dependent upon passage of LB 689 ********
- 6. June 15-December 31, 2005: The Distance Education Enhancement Task Force meets to formulate recommendations to upgrade and coordinate distance education.
- 7. December 31, 2005: The Distance Education Enhancement Task Force submits its improvement plan to upgrade and coordinate distance education in Nebraska. The report shall include recommendations for policies and potential legislation to the Clerk of the Legislature.
- 8. January-April, 2006 Pending the recommendations of the Distance Education Enhancement Task Force, the Legislature considers additional funding support for the distance education enhancement project.
 - **** All remaining events and the accompanying timeline are purely hypothetical and are provided in an attempt to demonstrate the feasibility of the overall project *****

- 9. May, 2006: Pending the funding and policy recommendations of the Legislature, the DAS-Division of Communications, in partnership with CAP, ESUs, and distance learning consortia, construct and release an RFP and bid process that provides for a master purchasing contract for wide area, high bandwidth, flexibly provisioned network circuits to all affected entities.
- 10. Date Uncertain: Bids are awarded by DAS-Division of Communications for a master purchasing contract for 180 45 Mbps or greater tail circuits that will be activated from 2006-08
- 11. November-December, 2005: First wave of school districts file e-Rate form 471s for "Telecommunications" from the Network Nebraska master contract, effective July 1, 2006.
- 12. May-August, 2006: The first wave of H.264 codecs, building routers, and aggregation routers are installed in K-12 and higher education sites, with DS-3 upgrades occurring from July 1-August 15, 2006.
- 13. July-August, 2006: Twenty-one H.264 cards are installed in the Mac500 codecs of the Sandhills Technology Education Partnership schools and the Crossroads Consortium schools
- 14. November-December, 2006: Second wave of school districts file e-Rate form 471s for "Telecommunications" from the Network Nebraska master contract, effective July 1, 2007
- 15. May-August, 2007: The second wave of H.264 codecs, building routers, and aggregation routers are installed in K-12 and higher education sites, with DS-3 upgrades occurring from July 1-August 15, 2007.
- 16. September 1, 2007: Over 300 education sites are united by a high bandwidth, wide area network, capable of point-to-point and point-to-multipoint IP videoconferencing, between schools and from schools to other entities.

Roles of the Involved Entities

The **Local Education Agency** (LEA) [e.g. school, ESU, college] is the end-user of the services and bandwidth available over the network. Currently, each school, ESU, or college maintains its own technical support staff. The level of support ranges from volunteer or stipended part time staff in smaller schools to multiple full-time staff in larger schools, ESUs and college campus network operations centers. Responsibilities of the LEA under the wide area, flexibly provisioned, high bandwidth network would include maintaining a secure Local Area Network (LAN) extending to the Ethernet port on the router, including but not limited to effective virus protection, current Operating Systems with updates on all devices, properly licensed software, uninterruptible power supplies, and device security. The LEA would also maintain its own videoconferencing and distance learning equipment or contract for maintenance on the equipment. The LEA would also own and maintain its building router using contracted vendor maintenance. The maintenance would include a current operating system, up-to-date access lists, appropriate reflective access lists, and redundancy of core devices to the extent possible. The LEAs would have representation on the Network Nebraska Advisory Group (NNAG).

The **Distance Learning Consortia** (DLC) directors currently function as schedulers, troubleshooters, eRate specialists, program developers, and the member schools' technical and contract liaisons to the telecommunication service providers. As the wide area network upgrade is phased in, DLC directors would be responsible for developing training materials on the new IP video technology for school district staff and teachers. DLC directors would also help: Develop specifications and guidelines for the provisioning of a statewide asset management system for monitoring of videoconferencing facilities; develop specifications and guidelines for a webbased event clearinghouse of educational programs and opportunities; and guide schools with the purchase and deployment of additional IP video devices. The DLC directors would become coordinators of digital content, operating as the programmatic representatives for area schools. The DLC directors would have representation on the Network Nebraska Advisory Group (NNAG).

The Educational Service Unit—Regional Network Operations Centers (ESU-RNOC), once established, would be the interfaces between the high bandwidth, wide area networks serving the LEAs and the Network Nebraska backbone. Currently, the ESU network operations staff individually assist with such services as e-mail, Internet filtering, network security, technical troubleshooting, and hardware and software applications. As the ESU-NROCs are established, the regional ESUs and colleges could opt to leverage existing staff expertise and hire new expertise to manage and maintain regional services. Although there would likely be some regional aggregation of servers and routers, these devices would be able to be managed remotely. The ESU-RNOCs would extend service contracts to LEAs to help manage their bandwidth and resolve issues related to Network Nebraska usage. The ESU-RNOCs would manage wide area network bandwidth usage/traffic within their regional aggregation. The ESU-RNOCs would manage/limit bandwidth usage/traffic when leaving the regional aggregations to traverse Network Nebraska. The ESU-RNOC would reserve the right to correct any network activity which compromises or potentially compromises the regional wide area network or Network Nebraska through insecure or illegal network use as well as non-educational or inappropriate network use. The ESU-RNOCs would provide consultation and support to LEAs as mutually agreed. The ESU-NROCs would assure compliance with all contractual terms and conditions related to access and transmission on Network Nebraska. The ESU-RNOCs would have representation on the Network Nebraska Advisory Group (NNAG).

The University of Nebraska Computing Services Network (UNCSN) would be the main contact between the ESU-NROCs and the service providers. The staff of the UNCSN would receive requests for service and convert them into service orders, helping to insure that the requirements of the customer are being met by the primary and secondary providers. The UNCSN would be the aggregator of Internet demand and purchaser of Internet service for the public entities who opt for this service through Network Nebraska. The UNCSN would also handle the routing of traffic to Internet2 among eligible entities. The UNCSN would staff the Level 2 Network Operations Center for education entities on Network Nebraska. The UNCSN would host the Network Nebraska website, www.networknebraska.net. The UNCSN would participate in the Network Nebraska Advisory Group (NNAG).

The **Department of Administrative Services—Division of Communications** (DAS-DOC) would be the main author of the Request for Proposal (RFP), with input and specifications

provided by the DLCs and ESUs. The DAS-DOC would negotiate the master purchase contract, allowing school districts and colleges or groups of school districts and colleges, to purchase services from the master purchasing contract. These services would include Internet access and/or transport from the major nodes (Norfolk, Omaha, Lincoln, Grand Island, Kearney, North Platte, Scottsbluff) of the statewide network and 45Mbps or greater transport through high bandwidth, wide area networking circuits on a regional basis. The DAS-DOC would charge an administrative fee to end users or groups of end users for use of its services. This administrative fee is regulated by the Federal government and must be the same fee charged to any DAS-DOC customer; local, state, or Federal. The administrative fee is currently set at 10% and includes the services of network management, network troubleshooting, network aggregation, consolidated billing, and contract negotiation. The DAS-DOC would participate in the Network Nebraska Advisory Group (NNAG).

Nebraska Educational Telecommunications (NET) would staff the Level 1 help desk and Network Information Center for Network Nebraska, answering the 1-888-NET-NEBR (888-638-6327) toll-free number. NET staff would assist with the master purchase of the building codec, switching and router equipment as well as consulting on room integration issues. NET would be a likely provider of digital content over the terrestrial and satellite transmitter network. NET would participate in the Network Nebraska Advisory Group (NNAG).

The **Nebraska Information Technology Commission** (NITC) would act as a facilitator of the process, providing staff assistance as needed to arrange and hold meetings, build consensus, draft documents, communicate with involved entities, and provide briefings to potential users, stakeholders, providers, and policy makers. The Legislature created the NITC to guide the State's investments in information technology. The NITC Technical Panel has recommended video compression protocol standards to accomplish a statewide synchronous videoconferencing network and can respond to subsequent requests for other networking standards. The NITC would provide staff support for, and participate in, the Network Nebraska Advisory Group (NNAG).

The **Nebraska Department of Education** (NDE) would offer policy and programmatic guidance to make sure that the resulting network capacity and videoconferencing system would be able to offer enough educational opportunities for schools to deliver the elements of an essential Nebraska education, as described by the State Board of Education. The NDE would take the State lead on helping to secure funding to make the project feasible. NDE would offer policy and funding guidance on matters related to E-Rate eligibility. The NDE would participate in the Network Nebraska Advisory Group (NNAG).

The **Nebraska Public Service Commission** (PSC) would offer policy guidance and consultation to make sure that the services and pricing offered by the telecommunications providers comply with the PSC telecommunications rules and regulations. The role of the PSC is to make sure that every available service and pricing alternative is being considered by the industry in order to improve the project affordability for Nebraska schools. The PSC would participate in the Network Nebraska Advisory Group (NNAG).

The **Network Nebraska Advisory Group** (NNAG) would provide the conduit for LEAs, DLC directors, and ESU-NROC staff to provide input to Network Nebraska and the members of the Collaborative Aggregation Partnership. Quarterly face-to-face or videoconferencing meetings would be held to discuss upcoming events, issues, and performance of the network. Membership would be open to any end-user or customer of Network Nebraska. The NITC would charter the Network Nebraska Advisory Group with a list of responsibilities and duties.

Funding Portfolio

Providing a feasible funding portfolio is a critically important piece of this project. However, many variables cannot be defined at this juncture. The actual and eventual costs of equipment and networking cannot be known without performing a bid process. So, scenarios can only be presented at this time based upon the industry's best estimates.

Notes: Site router and switches, H.263/H.264 codec and scheduling software are likely to be ineligible for E-Rate reimbursement unless included in a service product from telecommunications providers. If bid separately as equipment and software, these components would have to be paid for at the outset of the project or amortized over the life of the contract. Higher education and informal education partners are ineligible for E-Rate and state K-12 funding, therefore their upgrade costs must be taken into consideration.

The NDE budget adjustment document outlined project estimates for the equipment, maintenance, training, and management of the system. These numbers would vary considerably by the time of implementation, depending upon amortization and negotiation of a master purchase contract.

Sustainability

In most cases, the previous 10-year commercial video data service contracts of the DLCs failed to build in any escrow or funding to meet the future costs associated with equipment and technology upgrades at the culmination of the contracts. The next contracts for wide area, high bandwidth services must provide for some type of mechanism for funding technology upgrades at the end of the contract period.

Statewide Synchronous Video Network

Equipment Costs (as identified in the NDE Budget Adjustment request, 9-22-04)

Account Description by item	FY 06 Adj Req	FY 07 Adj Req	Est. Ongoing
School Site Router Hardware	\$ 800,000	\$ 800,000	\$ 0
School Site Router Maintenance	\$ 250,000	\$ 250,000	\$ 250,000
Aggregation Point Router Hardware	\$ 1,300,000	\$ 0	\$ 0
Aggregation Router Maintenance	\$ 200,000	\$ 200,000	\$ 200,000
School Site Codec Hardware	\$ 1,500,000	\$ 1,500,000	\$ 0
School site Codec Maintenance	\$ 200,000	\$ 200,000	\$ 200,000
Ancillary Equipment/LAN upgrades	\$ 1,200,000	\$ 1,700,000	\$ 500,000
Scheduling/Management system	\$ 745,000	\$ 725,000	\$ 350,000
Training and Support	\$ 200,000	\$ 200,000	\$ 200,000
Subtotal	\$ 6,395,000	\$ 5,575,000	\$ 1,700,000
	▼ ▲		
Account Description by item	FY 06-07 Adj Req	Est. Ongoing	Responsibility
School Site Router Hardware	\$ 1,600,000	\$ 0	Outside Funds
School Site Router Maintenance	\$ 500,000	\$ 250,000	LEA
Aggregation Point Router Hardware		\$ 0	Outside Funds
Aggregation Router Maintenance	\$ 400,000	\$ 200,000	Network NE
School Site Codec Hardware	\$ 3,000,000	\$ 0	Outside Funds
School site Codec Maintenance	\$ 400,000	\$ 200,000	LEA
Ancillary Equipment/LAN upgrades		\$ 500,000	Outside Funds
Scheduling/Management system	\$ 1,470,000	\$ 350,000	Outside Funds
Training and Support	\$ 400,000	\$ 200,000	ESUs/DLC
Subtotal	\$11,970,000	\$ 1,700,000	
Account Description by Source	FY 06-07 Adj Req	Est. Ongoing	
Outside Funds	\$10,270,000	\$ 850,000	
Network Nebraska	\$ 400,000	\$ 200,000	
Local Education Agencies	\$ 900,000	\$ 450,000 (\$228/m	nonth/site)
ESUs/DLC Directors	\$ 400,000	\$ 200,000	,
Subtotal	\$11,970,000	\$ 1,700,000	

Statewide Synchronous Video Network

Networking Costs (as estimated by telecommunications providers, September 2004)

Account Description by Service	Total Contract (7 yrs)
Qwest Network Price	\$ 30,634,227
NIN Network Price	\$ 15,400,000
Subtotal	\$ 46,034,227

Network Funding Scenario #1 (assuming full estimated cost of network, \$3342/month local contributions, no time value of money, with no buydown, and equipment paid for by others)

Account Description by Source	7yr Contract
Total Estimated Network Costs	\$ 46,034,227
Est. Local Contribution Before E-Rate (\$3342/mnth x 84 mnths x 164 sites) -	\$ 46,034,227
Gap in Network Funding	\$ 0

Network Funding Scenario #2 (assuming 20% discounted cost of network, \$2673/month local

Network Funding Scenario #2 (assuming 20% discounted cost of network, \$2673/month local contributions, no time value of money, with no buydown, and equipment paid for by others)

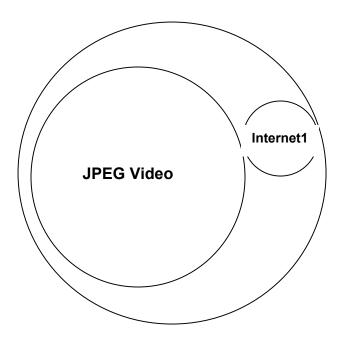
Account Description by Source	7yr Contract
Total Estimated Network Costs	\$ 36,827,377
Est. Local Contribution Before E-Rate (\$2673/mnth x 84 mnths x 164 sites) -	\$ 36,827,377
Gap in Network Funding	\$ 0

Network Funding Scenario #3 (assuming 20% discounted cost of network, \$1541/month local contributions, leveraging time value of money, with buydown, and equipment paid for by others)

Account Description by Source	7yr Contract
Total Estimated Network Costs	\$ 36,827,377
Est. Local Contribution Before E-Rate (\$1541/mnth x 84 mnths x 164 sites) -	\$ 21,228,816
Gap in Network Funding	\$ 15,598,561
Credit for Time Value of Money (9% x 7 yrs = Future Value Factor of 1.8280)-	\$ 7,065,431
Difference (Buydown)	\$ 8,533,130

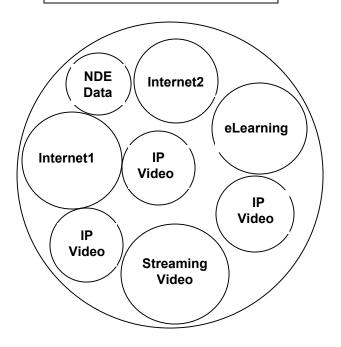
Difference (Buydown) would have to come from a combination of Local, State, and Federal sources.

45 megabit DS-3 fiber (old JPEG and T-1 Internet)



\$1325/month JPEG video \$ 216/month T-1 Internet

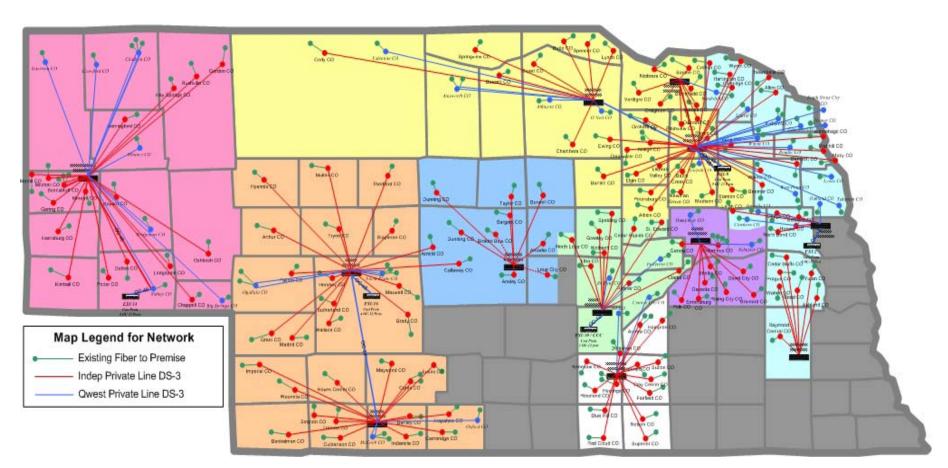
45 megabit DS-3 fiber (new Flexible Use)



\$1541/month full use of fiber capacity for IP Video, Internet1, Internet2, streaming video, eLearning, NDE data

Technology Conversion for Nebraska Education Network

[Formerly the Distance Learning Network]
Nebraska's Telephone / Telecommunications Industry



High School or Community-School/School	Bandwidth	Video Protocol		Dist. Learning Consortium	Contract Expires	Community College Area
Aurora	45 Mbps	JPEG	9	CNDEC	2008	Central CC
Aurora-Edgerton Explorit Center	45 Mbps	JPEG				Central CC
Blue Hill	45 Mbps	JPEG	9	CNDEC	2008	Central CC
Central City	45 Mbps	JPEG	7	CNDEC	2008	Central CC
Clay Center	45 Mbps	JPEG	9	CNDEC	2008	Central CC
Doniphan-Doniphan/Trumbull	45 Mbps	JPEG	9	CNDEC	2008	Central CC
Fairfield-South Central Unified 5	45 Mbps	JPEG	9	CNDEC	2008	Central CC
Hampton	45 Mbps	JPEG	9	CNDEC	2008	Central CC
Harvard	45 Mbps	JPEG	9	CNDEC	2008	Central CC
Hastings-Adams Central	45 Mbps	JPEG	9	CNDEC	2008	Central CC
Hastings-Central Community College	45 Mbps	JPEG			2000	Central CC
Hastings-ESU 9	45 Mbps	JPEG	9	CNDEC	2008	Central CC
Kenesaw	45 Mbps	JPEG	9	CNDEC	2008	Central CC
Nelson-South Central Unified 5	45 Mbps	JPEG	9	CNDEC	2008	Central CC
Red Cloud	45 Mbps	JPEG	9	CNDEC	2008	Central CC
Roseland-Silver Lake	45 Mbps	JPEG	9	CNDEC	2008	Central CC
Superior-South Central NE Unified 5	45 Mbps	JPEG	9	CNDEC	2008	Central CC
Superior-South Central NE Offilied 5	•	JPEG		CNDEC	2008	Central CC
Giltner (NO DL)	45 Mbps	JFEG	9	CNDEC	2006	
· ,	1.5 Mbps		9			Central CC
Hastings Senior High (NO DL) Brainard-East Butler	11 Mbps	MPEG2	9	Crossroads	2012	Central CC
	45 Mbps		7			Central CC
Columbus	45 Mbps	MPEG2	7	Crossroads	2012	Central CC
Columbus-Central Community College	45 Mbps	MPEG2	7	Crassranda	2042	Central CC
Columbus-ESU 7	45 Mbps	MPEG2	7	Crossroads	2012	Central CC
Columbus-Lakeview	45 Mbps	MPEG2	7	Crossroads	2012	Central CC
David City	45 Mbps	MPEG2	7	Crossroads	2012	Central CC
Genoa-Twin River H.S.	1.5 Mbps	140500	7		0040	Central CC
Humphrey	45 Mbps	MPEG2	7	Crossroads	2012	Central CC
Osceola	45 Mbps	MPEG2	7	Crossroads	2012	Central CC
Polk-High Plains	45 Mbps	MPEG2	7	Crossroads	2012	Central CC
Rising City	45 Mbps	MPEG2	7	Crossroads	2012	Central CC
Schuyler Central	45 Mbps	MPEG2	7	Crossroads	2012	Central CC
Shelby	45 Mbps	MPEG2	7	Crossroads	2012	Central CC
Stromsburg-Cross County	45 Mbps	MPEG2	7	Crossroads	2012	Central CC
Allen	45 Mbps	JPEG	1	ENDLC	2009	Northeast CC
Ashland-Ashland/Greenwood	45 Mbps	JPEG	2	ENDLC	2009	Southeast CC
Bancroft-Bancroft/Rosalie	45 Mbps	JPEG	2	ENDLC	2009	Northeast CC
Cedar Bluffs	45 Mbps	JPEG	2	ENDLC	2009	Southeast CC
Clarkson	45 Mbps	JPEG	7	ENDLC	2009	Central CC
Coleridge	45 Mbps	JPEG	1	ENDLC	2009	Northeast CC
Crofton	45 Mbps	JPEG	1	ENDLC	2009	Northeast CC
Dodge	45 Mbps	JPEG	2	ENDLC	2009	Metro CC
Emerson-Emerson/Hubbard	3 Mbps	H.264	1	ENDLC	2009	Northeast CC
Fremont (NO DL)	1.5 Mbps		2	ENDLC	2009	Metro CC
Fremont-ESU 2	45 Mbps	JPEG	2	ENDLC	2009	Southeast CC
Hartington	45 Mbps	JPEG	1	ENDLC	2009	Northeast CC
Homer	3 Mbps	H.264	1	ENDLC	2009	Northeast CC
Hooper-Logan View	45 Mbps	JPEG	2	ENDLC	2009	Metro CC
Howells	45 Mbps	JPEG	7	ENDLC	2009	Central CC
Laurel-Laurel/Concord	45 Mbps	JPEG	1	ENDLC	2009	Northeast CC
Leigh	45 Mbps	JPEG	2	ENDLC	2009	Central CC
Lyons-Lyons/Decatur Northeast	45 Mbps	JPEG	2	ENDLC	2009	Northeast CC
Macy-Umo n ho n Nation	45 Mbps	JPEG	1	ENDLC	2009	Northeast CC
Mead	45 Mbps	JPEG	2	ENDLC	2009	Southeast CC
Newcastle	45 Mbps	JPEG	1	ENDLC	2009	Northeast CC
North Bend	45 Mbps	JPEG	2	ENDLC	2009	Metro CC
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Oakland-Oakland/Craig	45 Mbps	JPEG	2	ENDLC	2009	Northeast CC
Omaha-Metropolitan Community College	45 Mbps	JPEG				Metro CC
Pender	45 Mbps	JPEG	1	ENDLC	2009	Northeast CC
Prague	45 Mbps	JPEG	2	ENDLC	2009	Southeast CC
Raymond-Raymond Central	45 Mbps	JPEG	2	ENDLC	2009	Southeast CC
Scribner-Scribner/Snyder	45 Mbps	JPEG	2	ENDLC	2009	Metro CC
South Sioux City	45 Mbps	JPEG	1	ENDLC	2009	Northeast CC
Tekamah-Tekamah/Herman	45 Mbps	JPEG	2	ENDLC	2009	Northeast CC
Wahoo	45 Mbps	JPEG	2	ENDLC	2009	Southeast CC
Wakefield	45 Mbps	JPEG	1	ENDLC	2009	Northeast CC
Wakefield-ESU 1	45 Mbps	JPEG	1	ENDLC	2009	Northeast CC
Walthill	45 Mbps	JPEG	1	ENDLC	2009	Northeast CC
Wayne	45 Mbps	JPEG	1	ENDLC	2009	Northeast CC
West Point	45 Mbps	JPEG	2	ENDLC	2009	Northeast CC
Winnebago	45 Mbps	JPEG	1	ENDLC	2009	Northeast CC
Winside	45 Mbps	JPEG	1	ENDLC	2009	Northeast CC
Wisner-Wisner/Pilger	45 Mbps	JPEG	2	ENDLC	2009	Metro CC
Wynot	45 Mbps	JPEG	1	ENDLC	2009	Northeast CC
Yutan	45 Mbps	JPEG	2	ENDLC	2009	Southeast CC
Ponca (NO DL)	1.5 Mbps	11.004	1	1.51.0	0044	Northeast CC
Lincoln-Bryan Learning Community	1000 Mbps	H.264	18	LDLC	2014	Southeast CC
Lincoln-East H.S.	1000 Mbps	H.264	18	LDLC	2014	Southeast CC
Lincoln-Lincoln H.S.	1000 Mbps	H.264	18	LDLC	2014	Southeast CC
Lincoln-LPSDO	1000 Mbps	H.264	18	LDLC	2014	Southeast CC
Lincoln-Northeast H.S.	1000 Mbps	H.264	18	LDLC	2014	Southeast CC
Lincoln-North Star H.S.	1000 Mbps	H.264	18	LDLC	2014	Southeast CC
Lincoln-Southeast H.S.	1000 Mbps	H.264	18	LDLC	2014	Southeast CC
Lincoln-Southwest H.S.	1000 Mbps	H.264	18	LDLC	2014	Southeast CC
Lincoln-Science Focus School	1000 Mbps	H.264	18	LDLC	2014	Southeast CC
Atkinson-West Holt Rural H.S.	45 Mbps	JPEG	8	NVTP	2006	Northeast CC
Bartlett-Wheeler Central	45 Mbps	JPEG	8	NVTP	2006	Northeast CC
Butte-West Boyd Unified	45 Mbps	JPEG	8	NVTP	2006	Northeast CC
Chambers	45 Mbps	JPEG	8	NVTP	2006	Northeast CC
Clearwater-NE Unified District 1	45 Mbps	JPEG	8	NVTP	2006	Northeast CC
Elgin	45 Mbps	JPEG	8	NVTP	2006	Northeast CC
Ewing	45 Mbps	JPEG	8	NVTP	2006	Northeast CC
Lynch	45 Mbps	JPEG	8	NVTP	2006	Northeast CC
Neligh-ESU 8	45 Mbps	JPEG	8	NVTP	2006	Northeast CC
O'Neill	45 Mbps	JPEG	8	NVTP	2006	Northeast CC
Orchard-NE Unified District 1	45 Mbps	JPEG	8	NVTP	2006	Northeast CC
Petersburg-Boone Central (nonrenewal?)	45 Mbps	JPEG	8	NVTP	2006	Northeast CC
Spencer-West Boyd Unified	45 Mbps	JPEG	8	NVTP	2006	Northeast CC
Stuart	45 Mbps	JPEG	8	NVTP	2006	Northeast CC
Ainsworth	45 Mbps	JPEG	17	NCDLC	2008	Northeast CC
Ainsworth-ESU 17	45 Mbps	JPEG	17	NCDLC	2008	Northeast CC
Bassett-Rock County H.S.	45 Mbps	JPEG	17	NCDLC	2008	Northeast CC
Cody-Cody/Kilgore	45 Mbps	JPEG	17	NCDLC	2008	Mid-Plains CC
Springview-Keya Paha	45 Mbps	JPEG	17	NCDLC	2008	Northeast CC
Valentine	45 Mbps	JPEG	17	NCDLC	2008	Mid-Plains CC
Bloomfield	45 Mbps	JPEG	1	NE.NEDLC	2007	Northeast CC
Creighton	45 Mbps	JPEG	1	NE.NEDLC	2007	Northeast CC
Niobrara	45 Mbps	JPEG	1	NE.NEDLC	2007	Northeast CC
Osmond	45 Mbps	JPEG	8	NE.NEDLC	2007	Northeast CC
Plainview	45 Mbps	JPEG	8	NE.NEDLC	2007	Northeast CC
Randolph	45 Mbps	JPEG	1	NE.NEDLC	2007	Northeast CC
Santee	45 Mbps	JPEG	1	NE.NEDLC	2007	Northeast CC
Verdigre-NE Unified District 1	45 Mbps	JPEG	1	NE.NEDLC	2007	Northeast CC
Verdigite-INE Offilied District 1	FO IVIDES	JI LG	ı	INC.INCDEC	2001	Nottheast CC

336 Sites	affected I	by network	ungrade

Wausa	45 Mbps	JPEG	1	NE.NEDLC	2007	Northeast CC
Albion-Boone Central (unconsolidating?)	45 Mbps	JPEG	7	NE. NELA	2007	Central CC
Battle Creek	45 Mbps	JPEG	8	NE. NELA	2007	Northeast CC
Madison	45 Mbps	JPEG	8	NE. NELA	2007	Northeast CC
Neligh-Neligh/Oakdale	45 Mbps	JPEG	8	NE. NELA	2007	Northeast CC
Newman Grove	45 Mbps	JPEG	8	NE. NELA	2007	Northeast CC
Norfolk-Northeast Community College	45 Mbps	JPEG	U	INC. INCLA	2007	Northeast CC
Norfolk-Northeast Community College	45 Mbps	JPEG			2007	Northeast CC
Norfolk-Northeast Community College	45 Mbps	JPEG			2007	Northeast CC
Norfolk-Northeast Nebraska Arts Council	45 Mbps	JPEG			2007	Northeast CC
Norfolk	45 Mbps	JPEG	8	NE. NELA	2007	Northeast CC
Pierce	45 Mbps	JPEG	8	NE. NELA	2007	Northeast CC
Stanton	45 Mbps	JPEG	8	NE. NELA	2007	Northeast CC
Tilden-Elkhorn Valley	45 Mbps	JPEG	8	NE. NELA	2007	Northeast CC
Wayne-Wayne State College	45 Mbps	JPEG	Ū		2007	Troitingage 00
Wayne-Wayne State College	45 Mbps	JPEG			2007	
Ansley	45 Mbps	MPEG2	10	STEP	2012	Mid-Plains CC
Arcadia	45 Mbps	MPEG2	10	STEP	2012	Central CC
Broken Bow	45 Mbps	MPEG2	10	STEP	2012	Mid-Plains CC
Burwell	45 Mbps	MPEG2	10	STEP	2012	Northeast CC
Dunning	45 Mbps	MPEG2	10	STEP	2012	Mid-Plains CC
Loup City	45 Mbps	MPEG2	10	STEP	2012	Central CC
Merna-Anselmo/Merna	45 Mbps	MPEG2	10	STEP	2012	Mid-Plains CC
Sargent	45 Mbps	MPEG2	10	STEP	2012	Mid-Plains CC
Taylor-Loup County H.S.	45 Mbps	MPEG2	10	STEP	2012	Mid-Plains CC
Adams-Freeman H.S.	100 Mbps	H.264	5	SE.NEDLC	2011	Southeast CC
Arlington	100 Mbps	H.264	3	SE.NEDLC	2011	Metro CC
Auburn-ESU 4	100 Mbps	H.264	4	SE.NEDLC	2011	Southeast CC
Beatrice	100 Mbps	H.264	5	SE.NEDLC	2011	Southeast CC
Beatrice-ESU 5	100 Mbps	H.264	5	SE.NEDLC	2011	Southeast CC
Beatrice-Homestead National Monument	100 Mbps	H.264			2011	Southeast CC
Beatrice-Southeast Community College	100 Mbps	H.264			2011	Southeast CC
Bennington	100 Mbps	H.264	3	SE.NEDLC	2011	Metro CC
Blair	100 Mbps	H.264	3	SE.NEDLC	2011	Metro CC
Bruning-Bruning/Davenport H.S.	100 Mbps	H.264	5	SE.NEDLC	2011	Southeast CC
Chester-Thayer Central M.S.	100 Mbps	H.264	5	SE.NEDLC	2011	Southeast CC
Cook-Nemaha Valley	100 Mbps	H.264	4	SE.NEDLC	2011	Southeast CC
Crete	100 Mbps	H.264	6	SE.NEDLC	2011	Southeast CC
Davenport-Bruning/Davenport M.S.	100 Mbps	H.264	5	SE.NEDLC	2011	Southeast CC
Dawson-Dawson/Verdon	100 Mbps	H.264	4	SE.NEDLC	2011	Southeast CC
Daykin-Meridian	100 Mbps	H.264	5	SE.NEDLC	2011	Southeast CC
DeWitt-TriCounty	100 Mbps	H.264	5	SE.NEDLC	2011	Southeast CC
Deshler	100 Mbps	H.264	5	SE.NEDLC	2011	Southeast CC
Dorchester	100 Mbps	H.264	6	SE.NEDLC	2011	Southeast CC
Elkhorn	100 Mbps	H.264	3	SE.NEDLC	2011	Metro CC
Exeter-Exeter/Milligan H.S.	100 Mbps	H.264	6	SE.NEDLC	2011	Southeast CC
Fairbury	100 Mbps	H.264	5	SE.NEDLC	2011	Southeast CC
Fairmont-Fillmore Central M.S.	100 Mbps	H.264	6	SE.NEDLC	2011	Southeast CC
Falls City	100 Mbps	H.264	4	SE.NEDLC	2011	Southeast CC
Firth-Norris	100 Mbps	H.264	6	SE.NEDLC	2011	Southeast CC
Friend	100 Mbps	H.264	6	SE.NEDLC	2011	Southeast CC
Geneva-Fillmore Central H.S.	100 Mbps	H.264	6	SE.NEDLC	2011	Southeast CC
Gretna	100 Mbps	H.264	3	SE.NEDLC	2011	Metro CC
Hebron-Thayer Central H.S.	100 Mbps	H.264	5	SE.NEDLC	2011	Southeast CC
Henderson-Heartland	100 Mbps	H.264	6	SE.NEDLC	2011	Southeast CC
Humboldt-Humboldt/Table Rock/Steinauer	100 Mbps	H.264	4	SE.NEDLC	2011	Southeast CC
Johnson-Johnson/Brock	100 Mbps	H.264	4	SE.NEDLC	2011	Southeast CC
Lewiston	100 Mbps	H.264	4	SE.NEDLC	2011	Southeast CC

336 Sites affected by network upgrade

Appendix 3	336 Sites affect	ted by net	twork	upgrade		December 10, 2004
Lincoln-NDE	100 Mbps	H.264			2011	
Lincoln-Southeast Community College	100 Mbps	H.264			2011	Southeast CC
Louisville	100 Mbps	H.264	3	SE.NEDLC	2011	Metro CC
Malcolm	100 Mbps	H.264	6	SE.NEDLC	2011	Southeast CC
McCool Junction	100 Mbps	H.264	6	SE.NEDLC	2011	Southeast CC
Milford	100 Mbps	H.264	6	SE.NEDLC	2011	Southeast CC
Milford-ESU 6	100 Mbps	H.264	6	SE.NEDLC	2011	Southeast CC
Milford-Southeast Community College	100 Mbps	H.264			2011	Southeast CC
Murdock-Elmwood/Murdock	100 Mbps	H.264	3	SE.NEDLC	2011	Metro CC
Murray-Conestoga	100 Mbps	H.264	3	SE.NEDLC	2011	Metro CC
Nebraska City	100 Mbps	H.264	4	SE.NEDLC	2011	Southeast CC
Nebraska City-Visually Impaired	100 Mbps	H.264	4	SE.NEDLC	2011	Southeast CC
Odell-Diller/Odell Secondary	100 Mbps	H.264	5	SE.NEDLC	2011	Southeast CC
Omaha-ESU 3	100 Mbps	H.264	3	SE.NEDLC	2011	Metro CC
Omaha-Henry Doorly Zoo	100 Mbps	H.264				Metro CC
Omaha-Millard North	100 Mbps	H.264	3	SE.NEDLC	2011	Metro CC
Omaha-Millard South	100 Mbps	H.264	3	SE.NEDLC	2011	Metro CC
Omaha-Millard West	100 Mbps	H.264	3	SE.NEDLC	2011	Metro CC
Omaha-Westside Dist. 66	100 Mbps	H.264	3	SE.NEDLC	2011	Metro CC
Palmyra	100 Mbps	H.264	4	SE.NEDLC	2011	Southeast CC
Pawnee City	100 Mbps	H.264	4	SE.NEDLC	2011	Southeast CC
Plattsmouth	100 Mbps	H.264	3	SE.NEDLC	2011	Metro CC
Seward	100 Mbps	H.264	6	SE.NEDLC	2011	Southeast CC
Shickley	100 Mbps	H.264	6	SE.NEDLC	2011	Southeast CC
Stella-SE Consolidated	100 Mbps	H.264	4	SE.NEDLC	2011	Southeast CC
Sterling	100 Mbps	H.264	4	SE.NEDLC	2011	Southeast CC
Syracuse-Syracuse/Dunbar/Avoca	100 Mbps	H.264	4	SE.NEDLC	2011	Southeast CC
Tecumseh	100 Mbps	H.264	4	SE.NEDLC	2011	Southeast CC
Utica-Centennial	100 Mbps	H.264	6	SE.NEDLC	2011	Southeast CC
Valley-Waterloo/Valley	100 Mbps	H.264	3	SE.NEDLC	2011	Metro CC
Waterloo-Waterloo/Valley	100 Mbps	H.264	3	SE.NEDLC	2011	Metro CC
Waverly	100 Mbps	H.264	6	SE.NEDLC	2011	Southeast CC
Weeping Water	100 Mbps	H.264	3	SE.NEDLC	2011	Southeast CC
Wilber-Clatonia	100 Mbps	H.264	6	SE.NEDLC	2011	Southeast CC
Wymore-Southern H.S.	100 Mbps	H.264	5	SE.NEDLC	2011	Southeast CC
York	100 Mbps	H.264	6	SE.NEDLC	2011	Southeast CC
Auburn (NO DL)	1.5 Mbps		4			Southeast CC
Bellevue East (NO DL)	1.5 Mbps		3			Metro CC
Bellevue West (NO DL)	1.5 Mbps		3			Metro CC
Fort Calhoun (NO DL)	1.5 Mbps		3			Metro CC
Omaha Benson (NO DL)	3.0 Mbps		19 10			Metro CC
Omaha Bryan (NO DL)	3.0 Mbps		19 10			Metro CC
Omaha Burke (NO DL)	3.0 Mbps		19 19			Metro CC Metro CC
Omaha Central (NO DL) Omaha North (NO DL)	3.0 Mbps		19			Metro CC
Omaha Northwest (NO DL)	3.0 Mbps 3.0 Mbps		19			Metro CC
Omaha South (NO DL)	3.0 Mbps		19			Metro CC
Papillion-LaVista (NO DL)			3	SE.NEDLC	2009	Metro CC
Papillion-LaVista (NO DL) Papillion-LaVista-South (NO DL)	100 Mbps 4.5 Mbps		3	SE.NEDLC	2009	Metro CC
Ralston (NO DL)	100 Mbps		3	SE.NEDLC	2009	Metro CC
Springfield-South Darpy Dist. 46 (NO DL)	•		3	SE.NEDLC	2009	Metro CC
Arapahoe	45 Mbps	JPEG	3 11	SW.NEDLC	2006	Central CC
Arapanoe Arnold	45 Mbps	JPEG	10	SW.NEDLC	2006	Mid-Plains CC
Arthur-Arthur County H.S.	45 Mbps	JPEG	16	SW.NEDLC	2006	Mid-Plains CC
Bartley-Southwest Public Schools	45 Mbps	JPEG	15	SW.NEDLC	2006	Mid-Plains CC
Benkelman-Dundy County H.S.	45 Mbps	JPEG	15	SW.NEDLC	2006	Mid-Plains CC
Brady	45 Mbps	JPEG	16	SW.NEDLC	2006	Mid-Plains CC
Callaway	45 Mbps	JPEG	10	SW.NEDLC	2006	Mid-Plains CC
Gallaway	Edulai Ot	01 LG	10	OVV.INLDLO	2000	WING-1 IGHTS CC

Appendix 3	336 Sites affected by network upgrade					December 10, 2004
Cambridge	45 Mbps	JPEG	11	SW.NEDLC	2006	Central CC
Culbertson-Hitchcock Co Unified	45 Mbps	JPEG	15	SW.NEDLC	2006	Mid-Plains CC
Curtis-Medicine Valley	45 Mbps	JPEG	15	SW.NEDLC	2006	Mid-Plains CC
Curtis-NE College of Tech Ag	45 Mbps	JPEG				
Eustis-Eustis/Farnam	45 Mbps	JPEG	11	SW.NEDLC	2006	Mid-Plains CC
Grant	45 Mbps	JPEG	16	SW.NEDLC	2006	Mid-Plains CC
Hayes Center	45 Mbps	JPEG	15	SW.NEDLC	2006	Mid-Plains CC
Hershey	45 Mbps	JPEG	16	SW.NEDLC	2006	Mid-Plains CC
Hyannis	45 Mbps	JPEG	16	SW.NEDLC	2006	Western CC
Imperial-Chase County H.S.	45 Mbps	JPEG	15	SW.NEDLC	2006	Mid-Plains CC
Indianola-Southwest Public Schools	45 Mbps	JPEG	15	SW.NEDLC	2006	Mid-Plains CC
Madrid-Wheatland	45 Mbps	JPEG	16	SW.NEDLC	2006	Mid-Plains CC
Maxwell	45 Mbps	JPEG	16	SW.NEDLC	2006	Mid-Plains CC
Maywood	45 Mbps	JPEG	15	SW.NEDLC	2006	Mid-Plains CC
McCook	45 Mbps	JPEG	15	SW.NEDLC	2006	Mid-Plains CC
McCook-MidPlainsCC	45 Mbps	JPEG				Mid-Plains CC
McCook-MidPlainsCC	45 Mbps	JPEG				Mid-Plains CC
Mullen	45 Mbps	JPEG	16	SW.NEDLC	2006	Mid-Plains CC
North Platte	45 Mbps	JPEG	16	SW.NEDLC	2006	Mid-Plains CC
North Platte-ESU 16	45 Mbps	JPEG	16	SW.NEDLC	2006	Mid-Plains CC
North Platte-MidPlains CC	45 Mbps	JPEG				Mid-Plains CC
North Platte-MidPlains CC	45 Mbps	JPEG				Mid-Plains CC
North Platte-UN West Central Research	45 Mbps	JPEG				
Ogallala	45 Mbps	JPEG	16	SW.NEDLC	2006	Mid-Plains CC
Ogallala-ESU 16	45 Mbps	JPEG	16	SW.NEDLC	2006	Mid-Plains CC
Oxford-Southern Valley	45 Mbps	JPEG	11	SW.NEDLC	2006	Central CC
Paxton-Consolidated	45 Mbps	JPEG	16	SW.NEDLC	2006	Mid-Plains CC
Stapleton	45 Mbps	JPEG	16	SW.NEDLC	2006	Mid-Plains CC
Sutherland	45 Mbps	JPEG	16	SW.NEDLC	2006	Mid-Plains CC
Thedford	45 Mbps	JPEG	16	SW.NEDLC	2006	Mid-Plains CC
Trenton-ESU 15	45 Mbps	JPEG	15	SW.NEDLC	2006	Mid-Plains CC
Trenton-Hitchcock Co. Unified	45 Mbps	JPEG	15	SW.NEDLC	2006	Mid-Plains CC
Tryon-McPherson County H.S.	45 Mbps	JPEG	16	SW.NEDLC	2006	Mid-Plains CC
Wallace	45 Mbps	JPEG	16	SW.NEDLC	2006	Mid-Plains CC
Wauneta-Wauneta/Palisade	45 Mbps	JPEG	15	SW.NEDLC	2006	Mid-Plains CC
Cedar Rapids	45 Mbps	JPEG	7	TVDEC-N	2009	Central CC
Elba	45 Mbps	JPEG	10	TVDEC-N	2009	Central CC
Clarks-High Plains Community M.S.	45 Mbps	JPEG	7	TVDEC-N	2009	Central CC
Columbus-ESU 7	45 Mbps	JPEG	7	TVDEC-N	2009	Central CC
Fullerton	45 Mbps	JPEG	7	TVDEC-N	2009	Central CC
Greeley-Greeley/Wolbach	45 Mbps	JPEG	10	TVDEC-N	2009	Central CC
Scotia-North Loup Scotia	45 Mbps	JPEG	10	TVDEC-N	2009	Central CC
Palmer	45 Mbps	JPEG	7	TVDEC-N	2009	Central CC
Spalding	45 Mbps	JPEG	10	TVDEC-N	2009	Central CC
St. Edward	45 Mbps	JPEG	7	TVDEC-N	2009	Central CC
Wolbach-Greeley/Wolbach	45 Mbps	JPEG	10	TVDEC-N	2009	Central CC
Alma	100 Mbps	H.264	11	TVDEC-S	2009	Central CC
Amherst	100 Mbps	H.264	10	TVDEC-S	2009	Central CC
Axtell	100 Mbps	H.264	11	TVDEC-S	2009	Central CC
Bertrand	100 Mbps	H.264	11	TVDEC-S	2009	Central CC
Cairo-Centura H.S.	100 Mbps	H.264	10	TVDEC-S	2009	Central CC
Cozad	100 Mbps	H.264	10	TVDEC-S	2009	Central CC
Elm Creek	100 Mbps	H.264	10	TVDEC-S	2009	Central CC
Elwood	100 Mbps	H.264	11	TVDEC-S	2009	Central CC
Franklin	100 Mbps	H.264	11	TVDEC-S	2009	Central CC
Gibbon	100 Mbps	H.264	10	TVDEC-S	2009	Central CC
Gothenburg	100 Mbps	H.264	10	TVDEC-S	2009	Central CC
Grand Island (NO DL)	1.5 Mbps		10			Central CC

Appendix 3	336 Sites affect	ted by net	work ı	ıpgrade		December 10, 2004
Grand Island-Central Community College	100 Mbps	H.264				Central CC
Hildreth-Wilcox/Hildreth	100 Mbps	H.264	11	TVDEC-S	2009	Central CC
Holdrege	100 Mbps	H.264	11	TVDEC-S	2009	Central CC
Holdrege-ESU 11	100 Mbps	H.264	11	TVDEC-S	2009	Central CC
Kearney	100 Mbps	H.264	10	TVDEC-S	2009	Central CC
Kearney-ESU 10	100 Mbps	H.264	10	TVDEC-S	2009	Central CC
Kearney-UN-Kearney	100 Mbps	H.264				
Lexington	100 Mbps	H.264	10	TVDEC-S	2009	Central CC
Litchfield	100 Mbps	H.264	10	TVDEC-S	2009	Central CC
Loomis	100 Mbps	H.264	11	TVDEC-S	2009	Central CC
Minden	100 Mbps	H.264	11	TVDEC-S	2009	Central CC
Ord	100 Mbps	H.264	10	TVDEC-S	2009	Central CC
Overton	100 Mbps	H.264	10	TVDEC-S	2009	Central CC
Pleasanton	100 Mbps	H.264	10	TVDEC-S	2009	Central CC
Ravenna	100 Mbps	H.264	10	TVDEC-S	2009	Central CC
Shelton	100 Mbps	H.264	10	TVDEC-S	2009	Central CC
St. Paul	100 Mbps	H.264	10	TVDEC-S	2009	Central CC
Sumner-Sumner/Eddyville/Miller H.S.	100 Mbps	H.264	10	TVDEC-S	2009	Central CC
Wilcox-Wilcox/Hildreth	100 Mbps	H.264	11	TVDEC-S	2009	Central CC
Grand Island NW (NO DL)	1.5 Mbps		10			Central CC
Wood River (NO DL)	1.5 Mbps		10			Central CC
Alliance	45 Mbps	JPEG	13	WNDLC	2009	Western CC
Bayard	45 Mbps	JPEG	13	WNDLC	2009	Western CC
Bridgeport	45 Mbps	JPEG	13	WNDLC	2009	Western CC
Chadron	45 Mbps	JPEG	13	WNDLC	2009	Western CC
Chadron-Chadron State College	45 Mbps	JPEG				Western CC
Chappell-Creek Valley	45 Mbps	JPEG	14	WNDLC	2009	Western CC
Crawford	45 Mbps	JPEG	13	WNDLC	2009	Western CC
Dalton-Leyton H.S.	45 Mbps	JPEG	14	WNDLC	2009	Western CC
Gering	45 Mbps	JPEG	13	WNDLC	2009	Western CC
Gordon	45 Mbps	JPEG	13	WNDLC	2009	Western CC
Harrisburg-Banner County H.S.	45 Mbps	JPEG	13	WNDLC	2009	Western CC
Harrison-Sioux County H.S.	45 Mbps	JPEG	13	WNDLC	2009	Western CC
Hay Springs	45 Mbps	JPEG	13	WNDLC	2009	Western CC
Hemingford	45 Mbps	JPEG	13	WNDLC	2009	Western CC
Kimball	45 Mbps	JPEG	14	WNDLC	2009	Western CC
Lodgepole-Creek Valley	45 Mbps	JPEG	14	WNDLC	2009	Western CC
Minatare	45 Mbps	JPEG	13	WNDLC	2009	Western CC
Mitchell	45 Mbps	JPEG	13	WNDLC	2009	Western CC
Morrill	45 Mbps	JPEG	13	WNDLC	2009	Western CC
Oshkosh-Garden County H.S.	45 Mbps	JPEG	14	WNDLC	2009	Western CC
Potter-Potter/Dix H.S.	45 Mbps	JPEG	14	WNDLC	2009	Western CC
Duahuilla	15 Mb.s.s	IDEC	40	MAIDLO	2000	Mantaus CC

45 Mbps

45 Mbps

45 Mbps

45 Mbps

45 Mbps

1.5 Mbps

1.5 Mbps

JPEG

JPEG

JPEG

JPEG

JPEG

13

13

13

14

14

14

WNDLC

WNDLC

WNDLC

WNDLC

2009

2009

2009

2009

Western CC

Rushville

Scottsbluff

Scottsbluff-ESU 13

Scottsbluff-Western NE Community College

Sidney-ESU 14

Sidney (NO DL)

Big Springs-South Platte H.S. (NO DL)

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336 Sites affected by network upgrade

December 10, 2004

Summary Data

Number of H.S. with 45 Mbps JPEG	152	
Number of H.S. with 45 Mbps MPEG2	20	
Number of H.S. with 100 Mbps	97	
Number of H.S. with 1.5-3.0 Mbps	23	
Number of ESUs with 45 Mbps JPEG	11	
Number of ESUs with 45 Mbps MPEG2	1	
Number of ESUs with 100 or 1000 Mbps	6	
Number of Hgher Ed/Informal Ed Sites	26	(17 JPEG, 1 MPEG2, 8 H.264)
	336	

Consortium	1
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Central Nebraska Distance Education Consortium
Crossroads Distance Education Consortium
Eastern Nebraska Distance Learning Consortium
Lincoln Distance Learning Consortium
Niobrara Valley TelePartnership
North Central Distance Learning Consortium
Northeast Nebraska Distance Learning Consortium
Northeast Nebraska Learners Academy
Sandhills Technology Education Partnership
Southeast Nebraska Distance Learning Consortium
Southwest Nebraska Distance Learning Consortium
TriValleyDistance Education Consortium-N&S
Western Nebraska Distance Learning Consortium

Acronym	Contact
CNDEC	Chris Petroff
Crossroads	Beth Kabes
ENDLC	Diane Wolfe
LDLC	Kirk Langer
NVTP	Nigel Buss
NCDLC	Nigel Buss
NE.NEDLC	Nigel Buss
NE. NELA	Nigel Buss
STEP	Rich Schlesselman
SE.NEDLC	Charles Doyle
SW.NEDLC	Shirley Schall
TVDEC	John Stritt
WNDLC	B.J. Peters

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The Distance Education Enhancement Task Force shall make recommendations for policies and potential legislation to the Clerk of the Legislature, the Education Committee of the Legislature, the Transportation and Telecommunications Committee of the Legislature on or before December 31, 2005.

The plan shall include, but not be limited to:	TECHNICAL	FINANCIAL	RELATIONAL	INSTRUCTIONAL
(1) The development of a high capacity,				
scalable telecommunications infrastructure for				
use in distance learning classrooms;				
(2) The development of an Internet protocol-				
based network to interconnect all existing and				
future distance education and				
videoconferencing facilities;				
(3) Upgrades of current telecommunications				
equipment;				
(4) Training and support programs for				
educators in the development and use of				
distance learning;				
(5) The transfer of distance education				
coordination responsibilities from distance				
education consortia to educational service				
units on or before July 1, 2007;				
(6) Statewide coordination for distance				
education offerings;				
(7) Potential funding sources;				
(8) The establishment of an equitable and				
affordable financing system for both equipment				
and usage;				
(9) The establishment of a system that allows				
school districts to purchase quality distance				
education offerings from other school				
districts either directly or with educational				
service units acting as fiscal agents;				
(10) Statewide provision of other technology-				
based services.				
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
Other				